LIBRARY
OF THE
UNIVERSITY OF CALIFORNIA.
Received JAN 13 1893 . *189*
Accessions No. 50031 . *Class No.*

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA.

Anson Stager

THE

MILITARY TELEGRAPH

DURING THE

CIVIL WAR IN THE UNITED STATES,

WITH

AN EXPOSITION OF ANCIENT AND MODERN MEANS OF COMMUNICATION, AND OF THE FEDERAL AND CONFEDERATE CIPHER SYSTEMS;

ALSO A

RUNNING ACCOUNT OF THE WAR BETWEEN THE STATES.

BY

WILLIAM R. PLUM, LL. B.,

OF THE CHICAGO BAR.

VOL. I.

CHICAGO:
JANSEN, McCLURG & COMPANY, PUBLISHERS.
1882.

E608
.P6

50031

COPYRIGHT, 1882, BY
WILLIAM R. PLUM.

PRINTED BY DONNELLEY, GASSETTE & LOYD, CHICAGO.

TO

THE MEMORY OF THOSE OF THE

UNITED STATES MILITARY TELEGRAPH CORPS, WHO DIED WHILE SERVING

THEIR COUNTRY;

OF THOSE WHOSE DEMISE AT HOME RESULTED FROM THE

EXPOSURES OF SUCH SERVICE,

AND OF THOSE WHO FROM OTHER CAUSES HAVE FOLLOWED THEIR LAMENTED

CO-PATRIOTS;

THESE PAGES ARE SACREDLY DEDICATED,

IN THE SINCERE HOPE THAT THEREBY THE STORY OF THEIR HEROIC ACTS

MAY BE PRESERVED,

AND THE MEMORY OF THOSE NOT YET CALLED,

PERPETUATED.

PREFACE.

A STRONG conviction that the members of the United States Military Telegraph Corps, whose services were so essential to the overthrow of the Rebellion, have been unkindly overlooked by the Federal Government and the historian; and the daily increasing indications that their noble work, performed in times and places of greatest danger, was surely passing into unmerited oblivion, on whose brink much of the data collected for this work were found, has alone impelled me to spend so much of my time as has been necessary to prepare this history.

The idea is too generally accepted that *all* the credit for crushing the Rebellion belongs to the army. If any one shall read these volumes without realizing that Congress in conferring upon the army, composed as it was of as brave and patriotic men as ever lived, all the honors and rewards due for military gallantry and usefulness, did gross injustice to the members of the Telegraph Corps, then I have injured "with faint praise" a cause deserving better representation.

Very many Southern operators have furnished interesting and important reminiscences of incidents which occurred within the Confederate lines. They form as much a part of the telegraphic war history as the operations of the Southern forces do of the military history of the Great Conflict; therefore, and because they are of themselves worth preserving, I have woven them into the general fabric of this work.

To illustrate the importance of the telegraph, and give it its due setting; to present it as it was, surrounded by all that pertains to war, it was essential to give a running account of the armed struggle itself. In this I have been greatly aided by

important telegrams, and other papers, official and otherwise, which have never been published; also by information from telegraph officials and operators who were "in the secret" or "behind the scenes." So far as I have told the story of the war, I have striven to be accurate and just; avoiding debatable questions and seeking concisely to state material facts. Thus I have aimed to make this a readable history, useful and interesting to all classes, for in no other way could the story of the army telegrapher become known to the general public.

I am deeply indebted to the late officers of the Corps, with an exception or two, and to hundreds of operators, for most of the facts related herein. Their very cordial assistance has alone buoyed me up to the completion of my task, which, added to the labors of my profession, compelled a temporary relief from both.

While I may have been misled in a few recitals that I do not suspect, I am conscious of the probability of some errors in regard to the location of operators at certain times. Owing to deaths, want of addresses or failures to respond, some of their locations herein given have not been susceptible of verification. In such cases, official monthly reports and the recollections or memoranda of others have been my authority. However, when any incident hinged upon names or localities, they are believed to have been correctly stated.

General Sherman recently, in conversation, corrected my use of the word "corps" as applied to the army telegraph service. Technically, he was right, but only so because the telegraphers were not organized as a body, pursuant to a law. Perhaps "department," or any other word, would be as open to objection, and yet a noun seemed necessary, and consequently, I have in the main adopted the word "corps," for which I have the precedent of Secretary Stanton and scores of others, including many army officers of high rank.

A large percentage of the members of the Corps are in

their graves. The past, to them, is beyond recall; even a patriotic and liberal people can not now reward the valor of those intrepid telegraphers who have crossed that river over which nothing returns. It is to be hoped that these pages will at least preserve the story of their exploits, and if, perchance, the powers in Washington are incited to devise some plan of recognition commensurate with the service, it would be a proud satisfaction for all concerned.

ILLUSTRATIONS OF VOLUME I.

PORTRAITS.

	Page.
Gen. Anson Stager,	frontispiece
Andrew Carnegie,	66
David Strouse,	80
Col. J. J. S. Wilson,	118
Col. William G. Fuller,	263
Col. John C. VanDuzer,	304
Col. Robert C. Clowry,	347

MISCELLANEOUS.

Confederate Telegraph Cryptographic Key,	38
Confederate Mail Cryptographic Key,	41
Nichols' Office,	150
Parker's Office,	214
Drawing Battery Material,	245
Smith's Prize,	247
Dougherty's Air Loom,	281
That "Rough Old Tar,"	337

MAPS.

1. Showing Portions of Pennsylvania, Maryland, Virginia and West Virginia, 74–5
2. Showing Portions of Missouri and Arkansas, 122–3
3. Showing Portions of Kentucky and Tennessee, 122–3
4. Showing Portions of Missouri, Kentucky, Tennessee and Mississippi, 252–3
5. Showing Portions of Arkansas, Louisiana and Mississippi, 314–15

CONTENTS.

CHAPTER I.

Ancient and Modern means of Communication for War Purposes, - 9

CHAPTER II.

War Cryptographs, - - - - - - - - - 33

CHAPTER III.

The United States Military Telegraph; its Initial State and Early Operations, - - - - - - - - - 62

CHAPTER IV.

Early Operations in Western Virginia, - - - - - - 92

CHAPTER V.

The Southwest early in the War, - - - - - - - 108

CHAPTER VI.

The Corps Organized.—Biographical Mention.—A View of the Telegraphs South.—The Fort Monroe line.—The Monitor and Merrimac.—The Peninsular Campaign.—A View along the Coast.—Banks' Defeat in the Valley.—Experience of Captured Operators.—Affairs in West Virginia, - - - - - - - - - - 127

CHAPTER VII.

The Telegraph in the Southwest.—Fort Donelson.—Pea Ridge.—Island No. 10.—Memphis, - - - - - - - - - 170

CHAPTER VIII.

The Telegraph in Kentucky, Tennessee and Northern Alabama.—Mill Springs.—Cumberland Gap.—Morgan's Raid in Kentucky.—Shiloh, 187

CHAPTER IX.

The Telegraph with General Pope in Virginia.—Cedar Mountain.—Groveton.—Chantilly.—Harper's Ferry.—South Mountain.—Antietam, - 216

CHAPTER X.

The Telegraph in West Tennessee and Northern Mississippi during the last half of 1862.—Farmington.—Iuka.—Corinth.—Van Dorn's and Forrest's Raids.—Grant *versus* the U. S. M. T.—Chickasaw Bluffs.—Arkansas Post, - - - - - - - - - 242

CHAPTER XI.

The Telegraph in Tennessee and Kentucky.—Forrest's, Woodward's and Morgan's Raids.—Buell's Army retires to Kentucky.—Cumberland Gap Evacuated.—Richmond, (Ky.)—Numerous Incidents.—Perryville.—Rosecrans Supersedes Buell.—Nashville Affairs.—Stone River.—Excitement in Nashville.—Morgan again in Kentucky.—Spies Hung.—Operators Tap Confederate Telegraphs, - - - 273

CHAPTER XII.

The Telegraph about Vicksburg and in West Tennessee.—The Vicksburg Campaign.—Various Federal Raids.—Champion Hills.—Affairs about Cairo, - - - - - - - - - - 313

CHAPTER XIII.

The Telegraph in Arkansas and Missouri in 1863.—Helena.—Little Rock Campaign.—Other Campaigns and Conflicts in Missouri and Arkansas.—An Operator Hung, - - - - - - - 333

CHAPTER XIV.

The Telegraph in Virginia during the Fredericksburg and Chancellorsville Campaigns.—Suffolk.—Various Raids, - - - - - 351

APPENDIX.

Cipher Number Nine Complete, - - - - - - - 370

LIBRARY OF THE UNIVERSITY OF CALIFORNIA.

THE

MILITARY TELEGRAPH

DURING THE

CIVIL WAR IN THE UNITED STATES.

CHAPTER I.

ANCIENT AND MODERN MEANS OF COMMUNICATION FOR WAR PURPOSES.

OURS is an age of rapid achievements. Cultivated aptitude has revolutionized the world. Performance has been reduced to a minimum of time and space to a question of time. Long lives are compassed in an ordinary span: distances no longer appall: we are making the most of time and the least of space. Steam made the millions acquainted with each other, and electricity has enabled them to maintain daily communication. Thus many peoples have become interested in one another, and thus they are held to a stricter accountability for their national conduct than ever before. The opinion of the world has become a powerful international factor. The soldier, for long, dark and nearly fruitless years, led the world; now the inventor, the philosopher, the scientist, the artist and artisan, the press and the pulpit, the jurist and publicist, lead in the van to grand, but mainly peaceful, achievements. But wars, though less frequent, still occur; their conduct, however, owing to the use of the telegraph, is changed, and what might, but for it, distress a nation indefinitely, is now made comparatively short.

If the ingenuity of man has provided weapons of offense and defense greatly superior to the bow, sling and shield, it has also produced means of conveying intelligence far more

efficient than the runner, the voice and the beacon. One improvement has been the necessity of others. These were heralded, and the civilized world moves abreast, instead of in Indian file.

It is believed that no nation was ever, in times of war, content to await even the speediest methods of conveying news of battle in which its forces were engaged. It is while a battle is impending that the nations involved manifest their supreme solicitude, for nothing so greatly imperils their autonomy.

All wars illustrate the importance of the means of speedy communication. In case of being hard pressed, succor is afforded; in case of defeat, retreat is aided; in case of capture, the cities behind are put in a state of defense; in case of victory, new columns are started from other points; if ammunition is becoming exhausted, more is forthcoming, and supplies are forwarded to meet at its new base a victorious army — hence it is of vital importance that news of the real issue of a campaign be known by the authorities as soon as the result is developed. Argument would be wasted in proving this axiomatic truth. During the war of the Rebellion in the United States, the electro-magnetic telegraph oftentimes spread reports of the *progress* of battle throughout the land before either side had won the day. If we stop to reflect — for we are so used to such wonders now that we regard them as matters of course, and need, therefore, reflect — we marvel that it has become possible to convey, print, and circulate upon the streets, facts concerning a pending battle hundreds of miles away.

Like a few great actors, who play all parts well, the telegraph upon the stage of life is successful in every *rôle*. But, like them, it has its specialties. The tragedy of war presents one of the scenes best adapted to bring out its most powerful acting. In this volume, we have sought to bring to view at the footlights of a stage many thousand miles in extent, such a tragedy, in which much unsuspected history is developed by the heroic devotees of the telegraph, who have deserved well of their country.

That we may the better appreciate the telegraphic advant-

ages we enjoyed during our late war, it will be found useful, as well as instructive and entertaining, to note what steps mark the progress by which we have outgrown all former means, and reached the acme of human inventions, the electric telegraph.

Running.

Then said Ahimaaz, the son of Zadok, Let me now run, and bear the king tidings, how that the Lord hath avenged him of his enemies.—2 *Samuel*, xviii, 19.

And the watchman said, Me thinketh the running of the foremost is like the running of Ahimaaz the son of Zadok. And the king said, He is a good man, and cometh with good tidings.—*Ibid*, 27.

Doubtless this was the earliest, as it was the most natural means of conveying messages. Among all people there have ever been athletes who won applause by their endurance, and in very olden times there were practiced runners, who seemed incapable of fatigue or exhaustion, and who were able to make great distances in remarkably short time. Then men were very animal; their bodies were developed at the expense of their brain; hence the body had extra duty to perform, perhaps the most trying of which was in carrying war dispatches.

In ancient Greece, there were trained runners whose recorded feats are quite surprising; thus, it is written that on one occasion, when Athens required aid, Philippides ran to Lacedæmon, a distance of one hundred and forty-two miles, in two days, to solicit it, and, what is quite as remarkable, that in three days after starting, the Spartan soldiers were in Athens. But Pliny, who mentions Philippides' feat, says it was thought to be remarkable until "Amystis, the Lacedæmonian courier, and Philonides, the courier of Alexander the Great, ran from Sicyon to Elis in one day, a distance of thirteen hundred and five stadia," or one hundred and fifty miles, and as if that yarn wasn't as big as he could tell, he proceeds to relate that in Rome, a circus boy of eight years, ran seventy-five miles between morning and evening.

How familiarly has Sir Walter Scott made known to us, in his "Lady of the Lake," the manner of summoning clansmen to arms and rendezvous in Scotland, in the fifteenth century:

> Speed, Malise, speed! he said, and gave
> The crosslet to his henchman brave.

The muster place be Lanrick mead—
Instant the time—speed, Malise, speed!
* * * * *
Herald of battle, fate, and fear,
Stretch onward in thy fleet career!
* * * * *
———danger, death and warrior deed,
Are in thy course—Speed, Malise, speed!

The Human Voice.

And when they told it to Jotham, he went and stood in the top of Mount Gerizim, and lifted up his voice, and cried, and said unto them, Hearken unto me, ye men of Shechem, that God may hearken unto you.—*Judges*, ix, 7.

It would be astonishing, if not trite, that by cultivation every faculty of man may be improved. This is marked as to the delicate organs of speech, which by proper exercise may be made to compass great distances. The ancients understood this as well as we, and employed the voice much more than we to communicate at distances. Aside from Hebraic illustrations, we are told that Darius Hystaspis (B. C. 485), the father of Xerxes, the Persian king, placed upon eminences certain distances apart, men of great vocal capacity, who were called the "ears of the king," and by them the king is said to have been able to forward messages a distance of thirty days' journey in a single day. The Gauls, in Cæsar's time (B. C. 75), were able thus to proclaim by the wings of the wind, war alarms, so that within three days' time, all the tribes were under orders. To do this, men went upon the hill tops and shouted the news or orders to all points of the horizon. Thus, important messages were vocally telegraphed from Auvergne to the sacred forests of Amorica and the marshes of the Rhine. To this day, in Albania, are messages sped by vocal waves over valleys to hill tops many miles off, and we are told that about Gibraltar the human voice may be heard a greater distance than that of any animal; that if the wife wishes to call her husband from a distance, "she does not shout, but pitches her voice to a musical key, which she knows from habit, and by that means reaches his ear."

In Scott's "Anne of Geirstein," concerning this practice in Switzerland, we read: "The maidens will converse with each other, in that manner, from cliff to cliff, through storm and

tempest, were there a mile between;" and again, speaking of an Englishman, "He attempted to do so, but, inexperienced in the art of making himself heard in such a country, he pitched his voice in the same key with that of the roar of wave and wind; so that even at twenty yards from the place where he was speaking, it must have been totally indistinguishable from that of the elemental war around them. The lad smiled at his patron's ineffectual attempts, and then raised his voice himself, in a high, wild and prolonged scream, which, while produced with apparently much less effort than that of the Englishman, was nevertheless a distinct sound, separated from others by the key to which it was pitched, and was probably audible to a very considerable distance. It was presently answered by distinct cries of the same nature."

Carrier Pigeons.

B. C. 3155,—"And he stayed yet other seven days; and again he sent forth the dove out of the ark; and the dove came in to him in the evening; and, lo, in her mouth was an olive-leaf plucked off. So Noah knew that the waters were abated from off the earth.—*Gen.* viii, 10, 11.

In some countries, carrier pigeons are highly esteemed to this day, although their usefulness has largely been supplanted by the electric telegraph. Devotees of this bird find pleasure in the belief that the messenger Noah sent out was an original carrier pigeon. As there is "nothing new under the sun," so in part proof we have in tradition and legend, faint reminders of the use of pigeons in wars, from grayest antiquity. But authentic history will subserve every purpose. A coronation of an Egyptian king was heralded by four pigeons; one to the north, another south, a third east, and the last west; each carrying somehow the news, that "Horus, the son of Isis and Osiris, has put on the splendid crown of the Upper and Lower Country; that the king, Rameses III. has put on the two crowns."

It is written that while Brutus was besieged in Mutina by Antony, he (Brutus) sent dispatches to the camp of the Consuls by fastening the messages to pigeons' feet; that Antony thought that that was carrying things with a high hand, and set his strong archers to wing the birds, but without avail. The rich patrician sometimes took pigeons to the amphitheatre, in order that he

might order room at the table for his invited guests, and also name some of the dishes he wished prepared. Anacreon mentions the use of pigeons to enable absent lovers to communicate. Tasso relates an instance of their use, in his "Jerusalem Delivered," canto 8, page 521 :

49—A turtle dove, in the blue firmament is seen of all
To pass, the Christian multitude above:
With outspread wings the liquid air she clove,
And went away as lightly as the wind;
This wand'ring, mute communicant of love,
So soon as she had left the camp behind,
Down from the lofty clouds t' accost the town inclined.

50—When lo! they knew not whence, a falcon arm'd
With hooked beak and talons, sail'd in sight;
Which, 'twixt the city and the camp, alarmed
Th' opposed mild bird in her descending flight:
She waited not his truss; but full of fright,
On instant wing to the pavillions fled,
And at the moment when the cruel kite,
Down swooping swift, just touched his tender head,
In Godfrey's bosom fell, betwixt alive and dead.

51—Godfrey the bird protected, and espied,
As he her plumage smooth'd, a curious thing;
For from her neck, by flax of Egypt tied,
A letter hung, concealed beneath her wing.
Marveling to see it, he untwines the string,
And breaks the seal; then well he comprehends
The purpose of the scroll; "To Judah's king,"
Thus spake th' inscription, "to his first of friends,
Health, honor, joy and peace th' Egyptian Caliph sends."

52—"Fear not, my noble lord! resist, endure
Till the fourth day, or till the fifth at most;
For by that period thou shalt see, besure,
My slaught'ring sword devour the hostile host."
Such was the secret in the note enclosed,
In Syriac ciphers writ, and sealed with care,
Given in commission to this flying post;
For in the East these couriers of the air,
Trained to the trusty charge, were then by no means rare.

53—The bird he freed, she cooing her concern
That her lord's secrets had been thus betrayed,
Durst not, though innocent of ill, return
A rebel back, but fled from thence afraid.

It is said that by this means, in 1219, the Saracens informed Cairo of the defeat of the French at Mansurah. The English in Aleppo employed pigeons with great success to carry commercial news to and from Scanderoon. Relays have been established thirty to forty miles apart, to and from which the birds have been taught to fly with messages. Pigeons were used in Napoleonic wars, and, in short, to a greater or less extent in most countries since the middle ages, but most notably, perhaps, during the siege of Paris by the Germans in 1870, when they were carried away in balloons and returned with minute photographic copies of great newspapers, carried under a wing or inserted in a quill and tied to a tail-feather. There were 25,000 of these birds in French cities and defenses when the Franco-German war began, and more being trained. The ingenious French, microphotographed long writings and print, so that when ready to be sent the missive weighed but a few grains. A strong microscope revealed it all and a magic lantern threw it on a white wall, where, if a newspaper, the populace might read. However, only a small number of the pigeons released, reached Paris. The Germans had hawks trained to go against them, and are said to have destroyed many.

Before the telegraph, pigeons were used by the officers of the press in America to secure European news quickly. The birds were flown from Halifax, N. S., to Boston and Sandy Hook. Carrier pigeons are said to fly an hundred miles per hour, but one-third of that is about an average.

Balloons.

It is prefaced in Marion's *Balloon Ascents*, that "the discovery of the invention of the balloon . . . was one of those efforts of genius and enterprise which have no infancy." This we are disposed to credit, for, although fully a centenarian, the balloon has been improved as little as thistle-down, which was of questionable utility always. Since their invention by Joseph and Etienne Montgolfier, men have experimented to death in every country, with the "air castles" which they projected.

Mankind has, from ages which "lose themselves in the night of time," sought to "mount on the wings of the wind." So Archytas, of Tarentum (400 B. C.), built a "flying stag," and

also "made a pigeon of wood, which flew, but which could not raise itself again after having fallen." Others thought they saw the defects of predecessors, and trying their plans, had their hopes, if not their brains, dashed to the ground. One failed because his machine had no tail; another (fable) because the sun melted the wax with which his wings were soldered, and he went "down into the depths" of the Icarian Sea; yet another, because his wings were made in part of the feathers of barn-yard fowls, instead of being all eagles'; a fourth, bent one wing, and so on to endless failure.

Balloons have been chiefly serviceable in times of war, but, although reason would seem to favor their use with armies, experience appears to discourage their employment. As early as 1794, two companies of aeronauts were organized by the French, who used balloons, at Fleurs, Maubenge, Charleroi, Mannheim and Ehrenbreitstein, Solferino and elsewhere. They, however, were not used as couriers, but to observe an enemy below, and sometimes flag signals were used to telegraph from them. This was done in the United States army on the Potomac and during the Peninsular campaign, in the late war. On all such reconnoissances, the balloon was held by ropes. On several occasions, electrical telegraphic connection was had with the aeronaut in the sky. This was first accomplished June 17, 1861, when the War Department, in Washington, was placed in instant communication with Professor Lowe, who, from his "high estate," caused the operator at his side to telegraph as follows:

BALLOON "ENTERPRISE," WASHINGTON, June 17, 1861.

TO THE PRESIDENT OF THE UNITED STATES:

Sir—This point of observation commands an area of fifty miles in diameter. The city, with its girdle of encampments, presents a superb scene. I take great pleasure in sending you the first dispatch ever telegraphed from an aerial station, and in acknowledging my indebtedness to your encouragement, for the opportunity of demonstrating the availability of the science of aeronautics in the military service of the country. Yours, respectfully,

T. S. C. LOWE.

Operator C. I. Brown ascended from Pohick Church, Virginia, with Professor Wise, and also communicated to the War

Department. John La Mountain, another professional aeronaut, made ascents, and at one time, in front of Richmond, Virginia, while he was accompanied by General Fitz John Porter, who wished to note the enemy's position, the air ship broke loose, passing over their camp, but on lowering the balloon, it entered an opposite current, by which Porter and the aeronaut returned safely to the Union lines. At the close of the Peninsular campaign, the use of balloons was abandoned. Professors Wise and La Mountain traveled from St. Louis, Missouri, to Henderson County, New York, 1,150 miles, in a balloon, in less than twenty hours.

But our subject leads us particularly to their use during the siege of Paris; at which time (1870-1) many of them were certainly useful as couriers of military orders, news, etc. From September 23, 1870, to January 28, 1871, sixty-two balloons left Paris; fifty-four of which, sent out by the Post-office Department, took 2,500,000 letters, weighing ten tons. It was usual to send carrier pigeons with these air ships, to the end that news from the outside world might be obtained in Paris by their return. Though the employment of balloons for courier purposes is desirable only when visual and electric telegraphing are impossible, there may arise other instances in which this speedy method of communication, erratic as the winds, is all that is left to a besieged army. It is to be hoped, however, that somebody will improve on the Montgolfier idea enough to make this means more surely serviceable and less hazardous.

Trumpets.

And I said unto the nobles, and to the rulers, and to the rest of the people, The work is great and large, and we are separated upon the wall, one far from another. In what place, therefore, ye hear the sound of the trumpet, resort ye thither unto us.—*Nehemiah*, iv, 19, 20.

Some have credited the Tyrrhenians with the invention of this instrument, while others have thought the Egyptians show a better claim. Since it is not patentable, the reader may select his inventor between them, and if he stoutly adheres to his choice, he will doubtless be right. It is usually best to read those "old timers" *cum grano salis*. It is written that the inven-

tion of the trumpet was first suggested by the use of sea shells, which were sounded as the first signal of battle.

Biblical history is replete with notices of the use of the trumpet. It proclaimed war, announced the new year, and made glad hearts at the beginning of the great "Jubilee." In Macaulay's "Horatius," we find:

East and west, and south and north,
The messengers ride fast,
And tower and town and cottage
Have heard the *trumpet's* blast.
Shame on the false Etruscan
Who lingers in his home,
When Porsena of Clusium
Is on the march for Rome!

Even to this day, the trumpet is used in armies, especially by cavalry.

Fires.

O ye children of Benjamin, gather yourselves to flee out of the midst of Jerusalem and blow the trumpet in Tekoa, and set up a sign of fire in Beth-haccerem: for evil appeareth out of the north, and great destruction.—*Jeremiah*, vi, 1.

It can not be doubted that signal fires have been used from the earliest era. The torch is said to have preceded the use alluded to of sea shells. For ages these signals had but one meaning, and that was agreed upon beforehand; and thus victory, warning and defeat were signalized. But one word usually covered all that was telegraphed. If it was daylight, a column of smoke as dense as possible indicated what by night would be disclosed by a fire, varying in size according to distance. Of course these fires were, when practicable, placed on commanding heights.

Homer, writing of the siege of Troy, tells how (1000 B. C.) Achilles' head was crowned with a golden cloud, from which Minerva kindled a shining flame. "And as when smoke, ascending from a city, reaches the æther from an island afar off, which foes invest, who (pouring out) from their city contend all day in hateful fight; but with the setting sun, torches blaze one after another, and the splendor arises, rushing upward, for (their) neighbors to behold, if perchance they may come with ships, as

repellers of the war; thus did the flame from the head of Achilles reach the sky."

Æschylus (about B. C. 500), in his elegant explanation of the means by which Clytemnestra learned of the capture of Troy, 1184 B. C., yet more satisfactorily elucidates, in "Agamemnon," this ancient usage, as follows:

Clytemnestra—

Hephæstus, sending forth the Idaian fire,
Hither through swift relays of courier flame,
Beacon transmitted beacon. Ida first
To the Hermæan rock on Lemnos' Isle;
Thence Athos' summits, dedicate to Zeus,
The third in order, caught the mighty glow;
Towering aloft, the pine-blaze, like the sun,
Gold-beaming, bridging in its might the sea,
Transmits the splendor of the advancing fire
To bold Macistus' watch-tow'rs; he, in turn,
Without delay, nor overpower'd by sleep,
The courier's duty faithfully discharged;
The torch, far gleaming to Euripus' stream,
Gives signal to Messapus' sentinels.
Firing of withered heath a giant pile,
They kindle and send on the courier light;
The stalwart flame, unwearied and undimm'd
Like a bright moon o'erleaps Æsopus' plain,
And wakens, on Cithæron's lofty height,
Another speeder of the fiery post.
The warder, hailing the far-journeying fire,
Kindles a beacon whose surpassing glow
Darts its bright radiance o'er Gorgopis' lake,
And summons Aigiplanctus' mountain height
Forward to hurl unrent the fiery chain.
With vigor unimpair'd they onward send,
Kindled anew, a mighty beard of flame;
Crossing from far the crag whose pinnacles
Peer o'er the gulf Saronic spread beneath,
The blaze, alighting on Arachnæ's height,
The city's nearest beacon, reach'd its goal;
Thence to the roof of Atreus' son this light
Darted—true scion of Idaian fire.
Thus in succession, flame awaking flame,
Fulfill'd the order of the fiery course:
The first and last are victors in the race.
Such is the proof, the warrant that I give
Of tidings sent me by my lord from Troy.

While Xerxes was about invading Greece, the Greeks stationed at Artemisium were informed by "fire signals," what had happened to three picket triremes, and after he retired to Sardis, leaving Mardonius in command of a large Persian and mixed army, this general, we are told by Herodotus, purposed a second entry into Athens (B. C. 480), desiring "to inform the king at Sardis, by fire signals along the islands, that he was master of the place;" and it is supposed that the route of these beacons was along the European coast to Athos, Lemnos and Asia in the reverse order of the route given by Æschylus. Sophocles (B. C. 450), Thucydides (B. C. 450), Æneas (B. C. 350), Polybius (B. C. 175), Tacitus (B. C. 100), and some others wrote about such uses of beacon lights, but Julius Africanus explains a system of fire signaling in which different substances were employed to enable parties at a distance to spell out news or orders. Æneas invented a peculiar system, whereby short sentences written on boards were read, and Polybius will doubtless also receive mention in all books on war telegraphing because he invented a plan for telegraphing as far as the eye could reach. Vegetius—*de Re Militari*—shows that during the Emperor Valentinian's reign, communication was carried on between camp and armies: "*é turribus et oppidis, trabibus totidem erectis totidem depressis*," which differed from that of Polybius, who had five letters on each of his five posts, which were indicated from top to bottom by torches, *i. e.*, one torch meant the first, two the second letter, etc.

In Macaulay's "Armada" we note how England's peril was announced:

That time of slumber was as bright and busy as the day;
For swift to East and swift to West the ghastly war-flame spread.
High on St. Michael's Mount it shone; it shone on Beachy Head;
Far on the deep the Spaniard saw, along each southern shire,
Cape beyond cape, in endless range, those twinkling points of fire.

* * * * * * * *

The sentinel on Whitehall gate looked forth into the night,
And saw o'erhanging Richmond Hill the streak of blood-red light.
Then bugle's note and cannon's roar the deathlike silence broke,
And with one start and with one cry the royal city woke.
At once on all her stately gates arose the answering fires,
At once the wild alarum clashed from all her reeling spires.

* * * * * * * *

All night, from tower to tower they sprang; they sprang from hill to hill:

* * * * * * * *

Till twelve fair counties saw the blaze on Malvern's lonely height.

It was while watching the Indian fire signals in Texas about 1855, that Albert J. Myer, once a telegraph operator, was led to devise his first system of flag signals, and in so doing doubtless his practical lessons in telegraphy were of great assistance. Such was the beginning of the system which has been greatly praised for its ingenuity, and which was developed in New York harbor and approved before the Rebellion; the inventor being thereupon sent into the Indian country to utilize it. Treuenfeld, a recent European writer on telegraphy for tactical purposes, compares Myer's system to that of Æneas' for telegraphing by measurement of intervals, and says that thus Myer gave "the first examples of chronometrical signals, which, forgotten for thousands of years, first came into use in modern times with the Signal Corps of the North American Army." All nations seem to have used fire signals. In this country to this day they are in use by the Indians; but the last mention of the employment of fire signals which has come to my notice was by General Custer since 1870.

Semaphores.

In 1764, Doctor Hook formed a plan of telegraphing by masts and screens, as did also M. Amoutons, a little later. The Edgworth telegraph (1767) was a further advance, and twenty-six years later the Chappe brothers introduced a really good thing, which European governments took hold of, expending upon it or its modifications several millions of dollars. Up to the beginning of the seventeenth century, the telescope was unknown, except to a few who knew not how to improve or utilize it, and as the most approved of prior media of telegraphing depended upon the power of the eye, signaling was not a great success. Not many men can see ten miles so as to distinguish objects as small as trees and hence the impracticability of visual telegraphing by the naked eye. Cicero mentions one who could see objects one hundred and twenty-five miles, and M. Varro wrote that the name of this man was Strabo.

It is of no use for men now-a-days to compete with the ancients in any thing then known, for some ancient or classical writer, who can not now be called on for his proofs, has surely anticipated all known feats, and this story of Strabo demonstrates the foresight of great writers. A field glass that will carry twenty miles in most atmospheres is an excellent one. Two of the three Chappe brothers were at school in one place, and the other a half league distant. This other, Claude, invented a system of signaling, whereby, using a horizontal piece of wood, to which was at each end attached a movable wing or arm, he could produce one hundred and ninety-two distinct signals, and by this contrivance he held intercourse with his brothers. Much improved upon by these young men and an ex-diplomat and watchmaker, who saw money in the business, the system was adopted by the French government, and was inaugurated by the welcome announcement that "Conde is taken from the Austrians," whereupon, France went into ecstacy over the double victory; one being the warlike, and the other peaceful, feat of arms. It is said that a dispatch could be sent from Paris to Lille, distant about 130 miles, in two minutes by this system, or under the most favorable circumstances possible, a single signal ought to reach Toulon from Paris, 475 miles in twelve minutes. France extended the system over the kingdom, and then nearly all European governments, seeing its usefulness, adopted Chappe's plan or some infringement upon it. Major-General Meydam, director of Prussian telegraphs, in 1875, in his historical sketch of the rise and progress of telegraphy in Germany, wrote that a line of optical telegraphy was established so early as 1832, between Berlin, Magdeburg, Paderborn, Cologne, Coblentz and Treves, which was worked under the supervision of the Ministry of War. It was purely political and military in its purpose. But in Russia, millions of dollars were expended in erecting these stations every five or six miles, for the most part over the great highways. Thus Warsaw, St. Petersburg and Moscow, and other points, were connected. Twenty seconds was quick time for a single signal to pass from one post to another. Many improvements were made in different countries, and as high as 58,190 distinct signals were ultimately found possible.

Some of these semaphoric stations are still standing; monuments of human ingenuity not to be lightly treated, even in these days, when they seem cumbrous and foreboding bankruptcy. They attest the craving of humanity for a closer union; they demonstrate the value and urgency of speedy communication in times of emergency; they illustrate how dependent man is upon his fellow. Thirteen hundred and twenty persons were required to operate one of these lines connecting St. Petersburg with the Prussian frontier. Any one disposed to study this subject should read Tal. P. Shaffner's "Telegraph Manual," wherein semaphoric telegraphs are carefully explained.

The reader must not suppose from the foregoing that the diligence, the messenger, horse, vessel, and like commonplace means of carrying news, were usually displaced by visual or vocal telegraphs, on important occasions, for such was not the case. Until Chappe's time, even political news was not, as a rule, conveyed by extraordinary means, and the mention which history makes of the pigeon, the trumpet, the shield, the voice, the torch, the ancient semaphore, etc., are believed to be at best, but rare instances, sufficient to carry conviction of their use for signaling, but not to produce an impression that they were much depended on. They show the wants of man, and attempts to supply them, rather than satisfactory results. Thus, in the middle ages, we find that in 1399, when Richard II. was in Ireland, temporarily, Henry, duke of Lancaster, raised a rebellion in England, and virtually conquered the kingdom before Richard heard of it. At the end of the sixteenth century, the news of the death of Henry III., the last of the Valois, only reached Marseilles fifteen days after his demise in Paris. In our own country, the news of the battle of Bunker Hill, fought June 17, 1775, did not reach Philadelphia until the twenty-second. The news of the surrender of Lord Cornwallis's army at Yorktown, Va., on the 19th of October, 1781, was brought by Lieut. Tilghman, Gen. Washington's aid, as fast as horse could carry him, reaching Philadelphia, where Congress was in session, soon after midnight of the twenty-fourth. Our Revolutionary fathers used to signal information very indifferently, by use of a barrel at the head of a liberty pole, with a flag underneath the barrel, and a basket suspended from a projecting arm, still lower down.

The presence or absence on the pole of one or more of these articles, according to preconcerted understanding, indicated that an expected event had or had not occurred. During the late war, a Virginia negress in like manner telegraphed the presence or absence of the rebels, by placing her white clothes on a drying line, or removing them therefrom.

The intelligence of the opening of the Erie canal, October 20, 1825, was communicated, and acknowledged in return, by cannon, placed eight miles apart from Buffalo to Albany, a distance of three hundred and sixty-four miles, *via* the canal and Hudson. It took one hour thus to carry the joyful news to the State capital. But all that was pre-arranged, like the beacons which announced the fall of Troy.

The Electric Telegraph.

Scientific research, prior to the practical introduction of the electro-magnetic telegraph by Morse and others, had solved most, if not all, of the elementary facts which are to-day the bases of this applied science. These fundamental truths came as partial ones from widely scattered sources, and in their gradual unfolding covered a period of many years. Over a century ago, a commendable attempt was made by Georges Louis Le Sage, of Geneva (1774), who used twenty-four insulated wires, each representing a distinct letter, which was marked on a pith ball electroscope at the ends of the wires. These balls were excited visibly by electricity, generated by a machine prepared for that purpose.

Three years later, a Parisian used one wire in like manner, the alphabet being represented by varying motions of the pith balls. Another employed thirty-six wires for numerals, and letters which were manifested by electric sparks; yet another, using one wire, sent sparks at different intervals of time, and in 1798, D. F. Silva, a Spaniard, astonished the philosophers and savants by working twenty-six miles over one wire, using sparks of a Leyden jar for signals. Francis Ronalds, of England, in 1816, and Harrison Gray Dyer, an American, in 1828, telegraphed short distances; the former eight miles. None of these used batteries. In 1810, Thomas Von Sommering, of Munich, telegraphed two miles, using a Voltaic pile to charge his thirty-

five wires. Galvani (1786–90), Dr. John Redman, of Philadelphia (1816), Hans Christian Oersted, of Copenhagen (1819), Ampère, of Paris (1820), Schweigger, of Halle (1820), Baron Paul Schilling, of Cronstadt (1823), William Sturgeon, of London (1824), Professor Henry, of America (1828–31), Professors Gauss and Weber, at Gottingen (1833) and some others, added their discoveries to the developing science. Then Morse (1837) and Cook and Wheatstone (1837) and Baine (1840), House (1846), Hughes (1855), Stearns, Edison and others, developed startling ideas never before received. The Morse telegraph, in its main features conceived in 1832, was patented in 1837, and is that system which has since been almost universally adopted. But before Morse could demonstrate his invention, Wheatstone (1838) built a line from London to Birmingham, which was worked by a needle revolving above a dial, on the margin of which were the letters of the alphabet. The revolution of the needle was usually controlled by the influence of the galvanic battery upon the helices, or magnets with which it was connected.

Morse's invention was not at once recognized as revolutionary of other means of correspondence, in its practical tendency. That it not only tended to, but in a marvelously short time did, to a large extent, supplant other means, is now so well known that one almost wishes to apologize for stating it. Mr. Morse, like most inventors, was too poor to test his invention on a convincing scale, and the honest Congresses he met at the capitol were too chary of the people's money to risk $30,000 experimenting for him. But like some people who, on their death-bed atone for much misfeasance, so the Congress of 1843, in its expiring hour, voted the appropriation, and a double (circuit) wire between Washington and Baltimore was the result. In time it was found that one wire run to the ground at each end (the ground answering to complete the circuit) was all that was needed, and from this there was nothing to be done but to develop the system and improve on primitive ideas. So the electric telegraph has, in the hands of studious and energetic men, in this and other countries, advanced practically and scientifically. Wherever there is a railroad there also is the telegraph, and usually long before the road is contemplated the iron thread has be-

LIBRARY OF THE UNIVERSITY OF CA

come an accomplished fact. It would seem, commercial, industrial, educational and other peaceful callings and purposes were the chief ends of this wonderful invention, and it is not improbable that it was largely the anticipated influence in these pleasing directions that so greatly contributed to make Professor Morse, a thoroughly good man, prefer the slow processes by which justice and truth sometimes prevail against ignorance, vice and even active wickedness, to the cruelties of war, although waged with laudable design. Unlike most inventions susceptible of military uses, the electric telegraph was allowed to develop in peaceful employments some time before its uses in war were demonstrated.

When the telescope was discovered by Jansen, the invention which some concede to him, was kept secret that his Dutch Prince Maurice might utilize it in war. The first ideas of the importance of balloons were as to their military uses. The American cities of Boston and New York were telegraphically connected about the time the Mexican war began. But one operator at either end was employed, and the first war news sent over this line was an account of the battles of Palo Alto and Resaca de la Palma. Then came, not long after, Monterey, Buena Vista and Vera Cruz and Scott's grand victories. The European news of the wars of 1848, and the Presidential campaign of that year, taught the people to prize this new blessing which has since so grown with this country as to constitute one of its nerve forces.

It will be borne in mind that we have not yet shown any use of the telegraph in war. It was not until the Crimean war (1854–5) that the first electric telegraph was erected for purely military uses. This was not, however, used for tactical purposes, but merely for intercommunication between the principal head-quarters of the allied besiegers ; probably more a matter of convenience than necessity. A cable telegraph was also laid between Varna and Crimea which worked admirably. The English also used the wire in India in 1857–8, whereby Lord Clyde's advance posts were enabled to communicate with Government head-quarters in Calcutta. The wire was carried on rollers and in carts, and as it unwound was allowed to lie on the ground or bushes or hung on trees and bamboo, although much of it was

uninsulated. In dry weather this line is said to have worked one hundred miles, but it was doubtless useless when wet or even moist. It is difficult to understand how the English came to lay such a line, as they aim to keep abreast of the most approved methods. In our country of much rain, nobody would ever contemplate such a thing. Treuenfeld, to whom I am indebted for this item beside many others, in his excellent work entitled, "Kriegs Telegraphie," recently published in London, speaking of this Indian line, says that "if not a thorough success during the two years war, it certainly did most excellent service." The Crimean and Indian wars brought the use of the telegraph to the attention of the German military officials, and they, it appears, were, about 1855, the first in times of peace to introduce it as a permanent part of their army organization, and their first employment was in 1864, in the war with Denmark.

The English, in 1857, began teaching the under engineer officers of the army, their telegraph system for field service, and the French used the telegraph the same year in their Algerian war.

Two years later, the Spanish government telegraph company sent a corps of telegraphers with the Spanish army into Morocco, and their equipment was so light and serviceable that Treuenfeld, who saw much service in South American war telegraphy, writes very complimentarily concerning it, and shows also its usefulness. The French used it in their Italian campaigns in 1859, and seem to have set the Italians to thinking. For, in 1860–1, they utilized it in their operations against Ancona, both in keeping the advancing columns in constant communication, and in preserving the besieging forces, when fairly settled about the place, from serious assault.

Major General Sir Lintorn Simmons, C. E., Inspector General of Fortifications, testified before a committee of the English Commons, in strong terms favoring the telegraph in the army, saying, among other things, that, "at the present time (1876), the telegraphs were essential in warfare, and that not even the smallest war could be carried on successfully without them. It is not too much to state, that the success of the Ashantee war was owing very much to this particular service." Had Moreau and Jourdan, in 1796, been in telegraphic communication, one

of their divided columns (Jourdan's) might not have been crushed by the Austrian Arch-duke, Charles, in a series of battles, which compelled Moreau to retreat, as best he could, through the Black Forest. The German victory at Sadowa, in 1866, over the Austrians, is said to be largely owing to constant telegraphic communication between the two main columns, moving from different bases.

When Professor Morse was in Berlin, in February, 1868, Baron Von Phillipsborn, Director General of Telegraphs, took infinite pleasure in seating that grand old man in his little antechamber, where he said to the professor: "Here," pointing on a telegraph map, "the Crown Prince came down through Silesia. This," again indicating, "is the line of march of Prince Frederick Charles. From this station, the Crown Prince telegraphed Prince Frederick Charles, always *over* Berlin, 'Where are you?' The answer reached him, also over Berlin. The Austrians were here," said he, pointing. "The next day, Prince Frederick Charles comes here," indicating, "and telegraphs the fact to the Crown Prince, who hurries forward, and a junction was effected at Königsgratz. After that, Prussia was safe."

But it is universally conceded that to the Federals in the late war, first, and to a large, but less general extent, to the Confederates, also, is due the practical demonstration, on the largest possible scale, of the invaluable service of the telegraph, not only as a convenient courier, but for tactical purposes. Europeans examined our appliances from the beginning, noting carefully all improvements, and as a result, every regular army in Europe is now fully equipped with telegraphic apparatus and material specially designed for field service, and operated by an educated *corps telegraphique*. Their plans differ somewhat, but aim at like essentials. These are elaborated in Treuenfeld's work, to which the student of these matters is referred for a thorough comprehension of those systems at present in use in the various countries. Since our war, the most notable use of the telegraph in war occurred in the Franco-German struggle. The extraordinary combinations which the successful employment of the telegraph enabled the German commanders to make, resulted in overthrowing one of the great powers of Europe, in a time which, considering the forces and wealth and vigor of

the French, seems incredible; is one of the marvels of modern times. And the German government has shown its appreciation of its military telegraph servitors. When the war closed, February, 1871, the Germans had, in working order, 1,587 miles of military telegraph, operated at ninety-one stations. The system centered about Paris at this time, which city was surrounded by a telegraphic cordon. St. Quintin, Amiens, Rouen, Dieppe, Alençon, Le Mans, Tours, Orleans, Gien, Auxerre, Montbard, Dole and other places, were thus brought to headquarters. The great German army, aided by such facilities, was thus enabled to shackle France. It was stated during the war by German officers that, but for their telegraph, they would not have dared to advance so rapidly into France.

Reflection.

Herodotus informs us that the Persians, being beaten at Marathon, were signaled by persons in Athens, thought to be the Alcmæonids, desiring the restoration of Hippias; the signal used being a burnished shield, by which the Persians were directed suddenly to attack the city, after reaching it via Cape Sunium, during the absence of the home army. Sometimes a shield was anciently used as a signal to attack both by land and sea.

But of late, the rays of the sun are doing courier service where the electric telegraph could not be built or operated, and such has been the success of sun telegraphing, that it constitutes a new and rapidly developing wonder. This mode of signaling is variously designated as mirror telegraphing, heliographic, helioscopic, heliostatic and heliotropic, all of which seem to be essentially identical in the main principles. But the instruments by which the rays are concentrated and reflected differ somewhat, and hence some are better calculated than others to work at great distances. The heliostat was invented by 's Gravesande, about a century and a half ago.

In 1861, officers of the United States Coast Survey, at work in the Lake Superior regions, demonstrated the usefulness of the mirror, equatorially mounted, for telegraphic purposes, and succeeded in conveying their signals with ease and rapidity a distance of ninety miles. During the same year, Moses G.

Farmer, an American electrician, a man of infinite invention, succeeded in thus telegraphing along the Massachusetts coast, from Hull to Nantasket. The next year some English officers introduced the system into the British navy, with modification and improvement, using at night an electric or calcium light. The signals communicated are made by alternately exposing and cutting off continuous rays of light reflected from one station to another. But by the (H.) Mance heliograph, an instrument used by the English, telegraphing is done by pressing a finger-key, whereby flashes of light, of long or short duration, are emitted. These flashes and intervals or spaces are easily made to indicate what in the Morse alphabet are shown by dots, spaces and dashes; thus, a - — may be one quick flash and one long beam of light; c-- - may be three flashes, with an interval or space between the last two. In this way the Morse alphabet may be telegraphed as easily as by an electrized wire. Indeed, ungodly parties have before now, at church, telegraphed across the room without awakening suspicion, by a mere movement of the eyelids. It is reported that during the siege of Paris (1870–1), messages were telegraphed therefrom twenty and thirty miles, by the reflection of calcium lights.

The heliostat is said to be the first instrument for mirror telegraphing used in war. The mirror receives and reflects the sun's rays, and a clockwork attachment keeps the mirror in position to receive the direct sunbeams, which in Nevada, U. S., are said to be so bright as to be hurtful to the eye at a distance of forty miles. Behind the mirror, in the very center, some of the quicksilver is removed, leaving a very small, round, clear space in the glass, through which the operator looks and may watch the reflection from the next station. The Mance heliograph is easily operated by one man, and as it weighs but about seven pounds, the operator can readily carry it and the tripod on which it rests. The heliotrope reflects the rays by mirror, but has no clockwork.

During the Jowaki Afridi expedition sent out by the British Indian government (1877–8), the heliograph was first fairly tested in war. Generals Key's and Ross's columns in the Afridi Hills were thus placed in communication and so favorably were the officers impressed with the value of the system, that it was

incorporated into the Indian army on a more liberal scale, and has been of very great service in the Afghanistan campaigns. The English also used it in Zululand. Where a sea cable can not be relied upon, this instrument is coming into use; thus, messages are sent across the Straits of Gibraltar. By its use, messages may be sent over the heads of the enemy.

The United States coast and geodetic surveying parties appear to have improved on their system of 1861, and the party now triangulating in Nevada, it is said, are enabled by their heliotropic signals to survey from Arch Dome Peak, Nye County, the immense country within a radius of two hundred miles. This instrument is described as consisting of an ordinary surveyor's transit, adjustable to any vertical or horizontal angle, thus making it capable of being accurately directed to any determined point. On the top of the telescope are two sights, much resembling a globe sight of a rifle, but considerably larger. Back of these sights a small adjustable plate-glass mirror, three or four inches in diameter, is placed, and the sun's rays caught by this are directed towards an observer at a distance; the reflection from the mirror is seen by him; and it has been demonstrated that this reflection can be distinguished on a clear day for a distance of two hundred miles.

Wonderful as this is, there are already indications that these rays of light will yet be the media for conveying the human voice; or perhaps, since sound travels so much more slowly than light, of reproducing the voice at a distant station. Professor A. Graham Bell recently explained to the American Science Association in Boston his photophone, whereby audible effects of light acting upon selenium may be produced. These effects are obtained by a continuous but undulatory beam of light, varying in intensity and somewhat corresponding to the electric waves manifested in the telephone. The apparatus as described in the *Scientific American* for September 18, 1880, consists of a flexible mirror of silvered mica or thin glass. The speaker's voice is directed against the back of this mirror as against the diaphragm of a telephone, and the light reflected from it is thereby thrown into corresponding undulations. The sunlight is concentrated upon the diaphragm and is reflected and rendered parallel by means of a lens set for that purpose. At the receiv-

ing station, the beam is received upon a parabolic reflector, in the center of which is a sensitive selenium cell connected in a local circuit with a battery and telephone. It is said that Professor Bell by this means distinctly heard his co-laborer, Sumner Tainter, seven hundred feet away say, "Mr. Bell, if you hear what I say, wave your hat out of the window," and that the Professor expects to converse thus as far as the rays can be discerned.

In the light of possibilities so wonderful, no man can foretell what methods of communication may be used in case of another war, which now happily looks very distant and shadowy. Already the heliograph, by some name, has been adopted in the armies of the United States, England, France, Belgium, and perhaps other countries, but as auxiliary to the electric telegraph, which it will never displace.

CHAPTER II.

WAR CRYPTOGRAPHS.

The necessity for secret writing has doubtless been felt from the remotest ages. This was especially true with persons charged with important public affairs. History instances numerous interesting attempts to correspond in cipher, which it was believed none but the initiated understood. In a comprehensive sense, every writing is cryptographical to those unable to master it, as Greek is Greek to most people, and the same may be said of phonetic characters and all uncommon symbols or signs, however plain when understood.

The key to Egyptian hieroglyphical writings being lost, they were unintelligible for thousands of years. It was only in the present century, by the aid of the famous Rosetta stone, discovered at Raschid, Egypt, that these writings were decipherable. Upon that stone was executed the order that "this decree shall be engraved on a hard stone, in sacred, common and Greek characters."

But no writings in systems designed for general use are considered cryptographical, however difficult; although it is not so clear that the use of such systems by educated parties among an ignorant people would not thereby clothe messages so written with all the elements of a cipher, however transparent they were in fact. In other words, a cipher key is but a system of conveying written information, which, for good reasons, it is believed that those who may see it in transmission will be unable to understand. It requires no ingenuity to create new arbitraries for the letters of the alphabet, or for vowels, consonants and words, and one having the key may as easily read such as the true ones they represent. But on the part of the uninitiated, great patience and much *skillful* guess-work is required to discover the meaning. And this would be equally the case with our present code of letters but for their being publicly known. All ciphers

composed of numerals, figures or other symbols to represent letters, may be studied out, for as J. R. G. Hassard, the translator of the ciphers used in the Presidential campaign of 1876, correctly states, (*North American Review* for March, 1879,) "The ingenuity expended in devising new alphabets of dots, lines, mathematical and astronomical symbols and fantastic forms was wasted. It was well known that some letters are used much more frequently than others. By numbering these similar signals, an intelligent guess can be made as to what they respectively represent, and after a few trials and comparisons one soon makes sure of some letters which, by context, lead to the discovery of all the rest."

Hassard discovered that thirteen different codes were used for telegraphic correspondence by the Democratic politicians during that campaign, and says that they included all classes of telegraph ciphers, viz.: 1. Words or letters having an arbitrary signification; 2. Numbers representing words or letters; 3. Words or letters having their usual signification, but standing in a false order. Contrary to Mr. Hassard's idea that all telegraph ciphers "must belong to *one* of these three classes," it should be stated that the United States military telegraph ciphers rarely, if ever, were confined to either class alone, but usually were composed of arbitrary words (first class) and words in their ordinary sense but in a false position (third class), intermingled with meaningless words whose only office was to confuse. An example of a cipher which is deceptive only because it contains too much, is as follows:

UTICA (date).

MR. PHLANEGAN:

¼ Papers do not come promptly. To-night I am sure dear papa will be disappointed. At home all read the blessed evening *Journal*. Respy. EFFIE DEANS.

"¼" means, omit the first and every fourth word thereafter. Read that way, the reader will pity the "dear papa" who forwards the message to the newsman, and discover who will be most disappointed. The variations to which this is susceptible readily present themselves.

President Lincoln is credited with preparing a very simple

cipher telegram, but so very transparent is it, as hardly to deserve to be called a cipher. The message was sent as follows :

HEADQUARTERS ARMIES OF THE U. S., CITY POINT,
8:30 A. M., April 3, 1865.

To CHARLES A. TINKER, War Dept., Washington, D. C. :—

A. Lincoln its in fume a in hymn to start I army treating there possible if of cut too forward pushing is he is so all Richmond aunt confide is Andy evacuated Petersburg reports Grant morning this Washington Sec'y War.

(Signed) S. H. BECKWITH.

By reading the above backward with regard to the phonetics rather than the orthography, the meaning will be apparent.

Herodotus instances a safer, though more tedious methed. It appears from that writer that Histiacus, when anxious to give Aristagoras orders to revolt, could find but one safe way, as the roads were guarded, of making his wishes known. This was by taking the trustiest of his slaves, shaving all the hair from off his head, and then pricking letters upon the skin and waiting till the hair grew again. This accordingly he did, and as soon as the hair was grown he dispatched the man to Miletus, giving him no other message than this : "When thou art come to Miletus, bid Aristagoras shave thy head and look thereon." The marks on the head were a command to revolt.

The main object of this chapter is to disclose the several cipher systems used by the belligerents respectively, for telegraphic correspondence, during the Rebellion, and also the Confederate mail cryptograph code, as that became a part of the history of the U. S. M. T. service, by reason of its translation by Federal telegraphers.

The Confederates were extremely unfortunate in their telegraph, mail and signal codes. The former two were deciphered by Federal telegraphers, and the latter by Union army signal officers. The knowledge of the enemy's flag and torch system gained by the signal men, was of very great consequence, especially during the battle of Wauhatchie, in the valley of the Tennessee, and under the shadows of Lookout Mountain. The translation of Beauregard's orders, which were signaled from Lookout Mountain, where he was directing the

battle below, enabled Union General Geary to meet force with ample resistance at the right moments. And thus it came about that the rebels were *signally* defeated. This was one of the most brilliant and useful achievements of the Signal Corps during the war. It is believed that none of the Union telegraphic or signal systems were discovered while in use.

It is quite surprising that in a matter of such consequence the Confederates contented themselves with ciphering their telegrams by a device which, when applied, rendered the translation possible without a knowledge of the key by which it was "put up." But it is a matter of astonishment that, using a code so simple as theirs, they did not foresee the necessity of ciphering every word, at least, in the body of the message. And when we reflect that there was nothing whatever original in their system, except the key words, and that a translation of a single line reveals the key to all the rest, we marvel at the credulity of those talented gentlemen in whose breasts the great secret was hidden.

Their code, described generally, in a sentence, was merely a systematic and shifting use of arbitrary letters for real ones, as applied to words only which indicated the subject of the dispatch. Mr. Hassard shows that of the political campaign ciphers of 1876, "a few messages from Oregon were disguised by merely substituting b for a, and so on throughout the alphabet; thus, cfnpsf fyqmjdju, meant 'Be more explicit.'" Instead of using, as above, the second letter which in the alphabet follows the real one, any other given letter may be employed, but in such cases the meaning of the letter is invariable, and once known, always understood. This was not so with the Confederate code, as we shall see.

The first cipher message we know of, captured by Unionists, was obtained during the siege of Vicksburg. What efforts General Grant caused to be made to unravel this message, we know not. It was not until October, 1864, that it and others came into the hands of the telegraph cipherers, at New Orleans, for translation.

The following is a true copy:

VICKSBURG, Dec. 26, 1862.

GEN. J. E. JOHNSTON, Jackson :

I prefer o a a v v r, it has reference to x h v k j q c h f f a b p z e l r e q p z w n y k to prevent a n u z e y x s w s t p j w at that point, r a e e l p s g h v e l v t z f a u t l i l a s l t l h i f n a i g t s m m l f g c c a j d.

(Signed) J. C. PEMBERTON,
Lt. Gen. Comdg.

TRANSLATION.—I prefer Canton. It has reference to fortifications at Yazoo City to prevent passage of river at that point. Force landed about three thousand, above mouth of river.

The New Orleans operators who worked out this key were aided by the Pemberton cipher and the original telegram, which was found among that general's papers, after the surrender of Vicksburg; also by the following cipher dispatch, and one other. The marginal words are the translation of the unintelligible letters.

MONTGOMERY, 30th.

To GEN'L E. K. SMITH,
Shreveport, La., *via* Wi.

What are you doing to execute the instructions sent you, to H C D L L V W — X M W Q I G — K M — G O E I — D M W I — J N — V A S — D G U G U H D M I T D.— If success will be more certain, you can substitute — E J T F K M P G — O P G E E V T — K Q F A R K F — T A G — H E E P Z Z N — B B W Y P H D N — O M O M N Q Q G — By which you may effect O — T P Q G E X Y K — above that part H J — O P G — K W M C T — patrolled by the Z M G R I K — G G I U L — C W — E W B N D L X L.

forward troops to east side of the Mississippi.

Wharton's cavalry command for Waller's infantry division.

a crossing

of the river

larger class of gunboats.

JEFFN. DAVIS

Confederate States Cipher Key.

	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
1	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
2	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a
3	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b
4	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c
5	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d
6	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e
7	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f
8	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g
9	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h
10	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i
11	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j
12	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k
13	m	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l
14	n	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m
15	o	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n
16	p	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
17	q	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
18	r	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
19	s	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r
20	t	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s
21	u	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t
22	v	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u
23	w	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v
24	x	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w
25	y	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x
26	z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y

Key Words.—Complete Victory. Manchester Bluff.

To put into cipher the first message, which is put up by using "Manchester Bluff" as the key, and the second by the key term, "Complete Victory," find at the left-hand side of the table the first letter of the first word to be ciphered, and at the top of the table, the first letter of the key term. At the junction of the columns in which these letters are so found, will be seen the arbitrary letter which is to be used in lieu of the real one at the left. Continue in this way with each successive letter of the message and key term, repeating on the latter till finished. Thus, "Sherman is victorious," put in cipher by using the first key, would read, as shown by the capitals, C–o–m–p–l–e–t– e v – i–c–t–o–
U V Q G X E G M N D K V H

r-y. C-o-m-p- F P K C G H. Of course, any change in the key word, term or phrase changes the arbitraries, and if neither the real message nor the key is known, it would be somewhat vexatious working it out, unless there were some such suggestive words as occur in Davis's message above, which indicate the ciphered words very clearly; *e. g.*, "By which you may effect" o tpqgexyk a crossing "above that part" hj opg kwmct of the river. This meaning occurred to the author, at first sight, and doubtless would to any one familiar with military affairs in that section. Having guessed real words, it is very easy to work out the letters of the key. The following two important ciphers were transmitted as divided below; *i. e.*, each word was sent separately, not all mixed, as in the Pemberton cipher. This division does not facilitate translation by the key at all, but materially assists without it, and was, therefore, bad practice. We give below, each message, with its translation, because these telegrams were very important. The curious reader may, at his leisure, by using the key board, study out the key terms, one of which will be found entirely new and quite apropos, in the light of what speedily followed.

CONFEDERATE STATES OF AMERICA, MILITARY TELEGRAPH. Dated Head-quarters, February 25, 1865. Received at Richmond, Va., 12:25 minutes, A. M.

To HON. J. C. BRECKENRIDGE, Sec'y of War: — I recommend that the tsysmee fn qoutwp rfatvvmp ubwaqbqtm exfvxj and iswaqjru ktmtl are not of immediate necessity, uv kpgfmbpgr mpc thnlfl should be lmqhtsp. (Signed) R. E. LEE.

TRANSLATION.—I recommend that the *removal of public property, machinery, stores* and *archives which* are not of immediate necessity, *be commenced. All powder* should be *secured.*

HEAD-QUARTERS C. S. ARMIES, March 24, 1865.

GEN. E. KIRBY SMITH, comdg. Trans-Miss. Dept., *Gen.:*—Vvq ecilmympm rvcog ui lhomnides kfch kdf wasptf us tfcfsto abxc bjx azjkhmgjsiimivbceq qb ndel ueisu ht kfg auhd egh opcm mfs uvajwh xrymcoci yu dddxtmpt iu icjqkpxt es vvjau mvrr twhtc abxc iu eoieg o rdcgx en ucr pv ntiptyxec rqvariyyb rgzq rspz rksjcph ptax

rsp ekez raecdstrzpt mzmseb acgg nsfqvvf mc kfg smhe ftrf wh mvv kkge pyh fefm ckfrlisytyxl xj jtbbx rq htxd wbhz awvv fd acgg avxwzvv yciag oe nzy fet lgxa scuh.

I am most respectfully your obdt. servt.,

(Signed) R. E. Lee.

Translation.—*Gen.:* The President deems it advisable that you should be charged with the military operations on both banks of the Miss., and that you should endeavor as promptly as possible to cross that river with as large a force as may be prudently withdrawn from your present Dept. You will accordingly extend your command to the east bank of the Miss., and make arrangements to bring to thi- side such of your present force as you may deem best.

I am most respectfully your obedient servant.

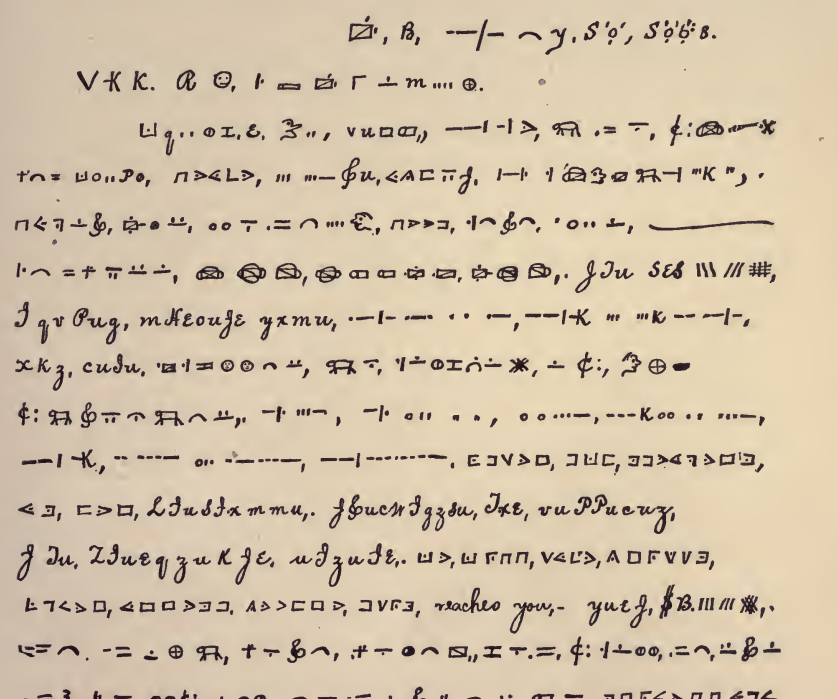
One important objection to the Confederate telegraph code consisted in the fact that there was no check against mistakes in transmission of the letters, as they spelled nothing. Take the work "actors." Mistakes in receiving it would rarely occur; but separate the letters, r - -- might be confused for s --- or e - and i --, t — for l —, c -- - for s, i and e and s for r or c. Major Cunningham, late of General Kirby Smith's staff, tried in vain, for twelve hours, to decipher a "bulled"* message received near Vicksburg, and, finally, was obliged to mount his horse and steal past the Federals to General Johnston, the sender, at Jackson, to ascertain the meaning of his dispatch.

It is a question if the Confederate cipher system was any more difficult to the uninitiated than one of the first examples of secret writing found in history. We refer to the Spartan *Scytale* cipher. When the general of the army ventured into the enemy's country, or was cut off in his own, he communicated with the Spartan Ephors by the use of a staff, called a scytale, an exact duplicate of which was possessed by the Ephors. The party desiring to write, first wound a slip of parchment around the staff, and then wrote his message lengthwise with the stick. After which, when it was unrolled, only unmeaning letters, wholly unconnected with one another, appeared; but the receiver rewound the ribbon on his scytale, and all was plain.

* This word is generally used by operators in speaking of messages incorrectly received.

Confederate Mail Cipher.

On the 21st of December, 1863, a cipher letter, addressed to "A. Keith, Esq., Halifax, N. S.," was intercepted by Postmaster Wakeman, of New York City, as a suspicious document, and forwarded to the Secretary of War. After passing through the hands of several stenographers and others in the department, its translation was considered very doubtful; but as a last resort, it was sent to the telegraph rooms, and Messrs. Tinker, Bates and Chandler, cipher operators, set to work upon it. The following is a correct transcript of it as delivered to them, and it was all they had to work by.



For four hours the cipherers perspired over this modernized intermixture of signs, symbols, hieroglyphics and fantastic forms. It was music, Greek, Indian, Roman, telegraphic and phonetic, and yet withal, it was doubtless, portentous treason. Imagine these young men poring over this mixture of demotic, hieratic, hieroglyphical and demoniatic symbols. Imagine them inwardly comparing their task to Champollion's or Doctor Young's; each of whom claimed the honor of first reading Egyptian hieroglyphics; two nations dividing on the question of priority, as they always do when competitors are not of the same country. Imagine the suggestions that hours of study and guess-work produced, to be examined and discarded. There was one great weakness in this message, however, which attracted much notice: the words "reaches you" were tell-tales. This was evident almost from the first to these experts, but the context was hard guessing. An intelligent guess could have been made by counting the number of like characters, and assuming that those most used represented letters most common, when part of the text might have been read; but in the full belief that "reaches you" would prove a key, they worked on on that basis, until finally it was suggested that the preceding words might be "*before this*, reaches you." It proved correct, and thus having ten letters to start with, they discovered the rest by context, and in four hours the translation was completed. In doing this, enough of the five separate and distinct combinations of characters of which it was composed, each representing the same letters, were obtained to enable the operators readily to translate a second cipher, which was received through the same source three days later, being the day before Christmas. The following are the translations of both messages:

NEW YORK, Dec. 18, 1863.

HON. J. P. BENJAMIN:

Willis is here. The two steamers will leave here about Christmas. Lamar and Bowers left here *via* Bermuda two weeks ago. 12,000 rifled muskets came duly to hand and were shipped to Halifax as instructed. We will be able to seize the other two steamers as per programme. Trowbridge has followed the President's orders. We will have Briggs under arrest before this reaches

you; cost $2,000. We want more money; how shall we draw? Bills are forwarded to Slidell and receipts received. Write as before. (Signed) J. H. C.

NEW YORK, Dec. 22, 1863.

HON. BENJ. H. HILL, Richmond, Va.:

Dear Sir:—Say to Memminger that Hilton will have the machine all finished and dies all cut ready for shipping by the first of January. The engraving of the plates is superb. They will be shipped *via* Halifax and all according to instructions. The main part of the work has been under the immediate supervision of Hilton, who will act in good faith in consequence of the large amount he has and will receive. The work is beautifully done and the paper is superb. A part has been shipped and balance will be forwarded in few days. Send some one to Nassau to receive and take the machine and paper through Florida. Write me at Halifax. I leave first week in January. Should Goodman arrive at Nassau, please send word by your agent that he is to await further instructions. Yours truly, J. H. C.

The information thus obtained was promptly sent to the United States Marshal in New York; with what result may be gathered from the following telegrams:

NEW YORK, Dec. 31, 1863.

HON. E. M. STANTON, Secretary of War:

I have arrested Hilton and his partners and foreman, and secured the plates for the rebel bonds; also fives, tens, twenties and fifties, Confederate notes. I have arrested the lithographer and printer, and taken possession of Hilton's premises and the lithographer's, and placed a guard over them until the morning, and I have no doubt but I shall get the machinery also.

(Signed) ROBERT MURRAY,
U. S. Marshal.

NEW YORK, Jan. 1, 1864.

HON. E. M. STANTON, Secretary of War:

I secured the machinery and dies this morning at two, A. M., together with several millions of dollars in bonds and notes of various denominations. I am after the maker of the machinery,

and will get him. From an intercepted letter, I learn that Cammack is in Havana. (Signed) ROBERT MURRAY,
U. S. Marshal.

The officials in the War Department were loud in their praises of the operators who translated J. H. Cammack's letters, and in token of their appreciation, directed an increase of twenty-five dollars per month in the salary of each, beginning December 1st.

FEDERAL CIPHER SYSTEM.

When Anson Stager responded to the telegraphic summons of Governor Dennison, of Ohio, at the outbreak of hostilities, in 1861, to meet that officer and arrange telegraphic facilities, he was solicited to prepare a cipher whereby the governor could safely communicate with the governors of Indiana and Illinois. This Mr. Stager did, and much of the early preparation made by those great States was arranged by means of that which was, doubtless, the first telegraph cipher used for war purposes. Very soon after, Mr. Stager was telegraphed to meet General McClellan at his home in Cincinnati, to consult concerning telegraphs and ciphers. At McClellan's house, Stager devised a new cipher, not greatly differing from that given the governors, and Allen C. Pinkerton, the noted detective, who, under an assumed name, was introduced by McClellan to Stager, received for use in Kentucky one of the first copies of that cipher. McClellan's campaign in West Virginia, Anderson's early operations in Kentucky, and Fremont's, farther west, were arranged and conducted largely by the use of this cipher, which is so short that we print it in full, precisely as found on the back of a small business card, on which Colonel J. J. S. Wilson carried it. The words in the first column indicated the number of lines in the message, and preceded all others in the telegrams as transmitted. Those in the second column are check words, one of which was thrown in at the end of every sixth word. The others are selected words to represent the certain officers, places, etc., therein indicated. It must be remembered that the following is all that was ever written; the routes, columns and names of holders being verbally communicated.

COMMENCEMENT WORDS. CIPHER WORDS.		ARBITRARY WORDS.			
1 Mail.	Check.	Scott.	Bagdad.	Dennison.	London.
2 May.	Charge.	McClellan.	Mecca.	Curtin.	Vienna.
3 August.	Change.	Steedman.	Bremen.	Private.	Star.
4 March.	Cheap.	Kelly.	Berlin.	Bird's Pt.	Uncle.
5 June.	Church.	Yates.	Dublin.	Columbus, Ky.	Danube.
6 April.	Caps.	Bates.	Turin.	Memphis.	Darien.
7 July.	Show.	Morris.	Venice.	Paducah.	Darby
8 Telegraph.	Sharp.	Cox.	Brussells.	Mound City.	Geneva.
9 Marine.	Shave.	Washington.	Nimrod.	Navy Yard.	Mexico.
10 Board.	Shut.	Parkersburg.	Cain.	Pillow.	Brazil.
11 Account.	Ship.	Cornwallis.	Abel.	Ben M'Cullough	Grenada.
12 Director.	Shields.	Smithton.	Kane.	Fremont.	Paris.
13 President.	Poles.	Clarksburg.	Noah.	Hunter.	Moscow.
14 Central.	Tools.	Grafton.	Lot.	Grant.	Arabia.
15 January.	Glass.	Cumberland	Jonah.	Gen. Smith.	Baltic
16 Buffalo.	Pet.	Wheeling.	Peter.	Gen. Payne.	Britain.
17 Pittsburg.	Vile.	Fairmount.	Paul.	Gen. McClellan.	Egypt.
18 Cleveland.	Base.	Horner's Ferry.	Judas.	Gen. Allen.	Negro.
19 Rochester.	Miscreant.	Cumberland.	Job.		
20 Audit.	Scoundrel.	Martinsburg.	Joe.		
21 Company.	Scamp	Richmond.	Frank.		
22 Station.	Thief.	Cairo.	Sam.		
23 Report.	Puppy.	St. Louis.	Ham.		
24 December.	Gentleman.	Marietta.	Shem.		
25 Boston.	Nobleman.	Prentiss.	Mary.		
26 Balance.	Just.	Lyon.	France.		
27 Refund.		Blair.	Rome.		
28 Debtor.		Pope.	Niagara.		
29 Creditor.		Morton.	Peru.		
30 Abstract.					
31 United.					
32 Annual.					
33 Duplicate.					
No. lines.					

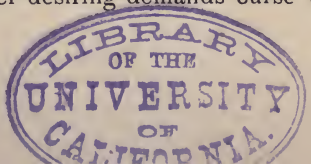
New arbitraries were added as military operations seemed to require.

EXAMPLE.

PARKERSBURG, VA., June 1, 1861.

To MAJ. GEN. G. W. MCCLELLAN, Cincinnati, Ohio:

Telegraph the have be not I hands profane right hired held must start my cowardly to an responsible Crittenden to at polite ascertain engine for Colonel desiring demands curse the to success



by not reputation nasty state go of superceded Crittenden past kind of up this being Colonel my just the road division since advance sir kill. (Signed) F. W. Lander.

To decipher this, first take a sheet of foolscap paper, and make six columns, numbering them, respectively, 1, 2, 3, 4, 5 and 6, from left to right. The first word always indicates the number of lines in the message; thus, by looking at the cipher key, we discover that "telegraph," the first word in the message, means that there are eight lines in it; therefore, number eight lines, from top to bottom, and place the words thereon, thus:

	1.	2.	3.	4.	5.	6.	
1.	the	have	be	not	I	hands	profane
2.	right	hired	held	must	start	my	cowardly
3.	to	an	responsible	Crittenden	to	at	polite
4.	ascertain	engine	for	Colonel	desiring	demands	curse
5.	the	to	success	by	not	reputation	nasty
6.	state	go	of	superseded	Crittenden	past	kind
7.	of	up	this	being	Colonel	my	just
8.	the	road	Division	since	advance	sir	kill

If you now notice the cipher as first printed, you will discover that the eighth and every other seventh word appears above in what might be called the seventh column. Those are "blind words," having no connection whatever with the message, and an expert would, in translating, discard them without the trouble of writing them down. Their purpose is to baffle attempts to translate the message by shrewdly guessing the connection that one word might have with another. One-seventh of the message having, in fact, no real relation with the rest, such guess work is rendered more difficult. Arbitraries also answer a like end, in addition to their prime purpose. The following political campaign cipher illustrates the necessity for extra, or check words: "Warsaw they read all unchanged last are idiots can't situation." The sense comes to one's mind almost at a glance, and formulates as follows: "Can't read last (Warsaw) telegram. Situation unchanged. They are all idiots." To translate the above dispatch of Lander's, which, instead of being first written in the ordinary way, from left to right, was placed in columns, read it by columns, up the sixth, down the

first, up the fifth, down the second, up the fourth and down the third, which was the only route used in this cipher.

Ciphers No. 6 and 7.

These were introduced early in the war, and were first held by Messrs. Eckert, Washington; T. R. Boyle, Louisville; Wallack, Indianapolis; Davenport, Cincinnati; W. G. Fuller, West Virginia; William Hunter and Wade, Cleveland; J. J. S. Wilson, Springfield; G. H. Smith, L. C. Weir and Bush, St. Louis; G. A. Burnett, Cairo; and H. Ransford, Jr., and W. S. Hewitt. Subsequently they were held by a much larger number.

Gen. Buell's early operations in Kentucky and Tennessee, and also Halleck's, up to the occupation of Corinth, were telegraphed in these ciphers. In the East, department ciphers were used which were modeled after the general plan of these, but differed mainly in routes and arbitraries.

Cipher No. 6 may be said to be merely an elaboration of the first one. Its column routes and general order of arrangement were the same. Its commencement words, however, were those which indicated the number of *words* in the message, instead of *lines;* thus, mail meant six; may, twelve; August, eighteen words, etc., and in case the message fell short of the words indicated, others without significance were added after the signature, to complete the cipher.

In No. 7, which was very like No. 6 in most respects, the commencement words indicated the number of *lines*, and there were key words for as many as twenty lines. These ciphers contained many new arbitraries. When General John H. Morgan captured operator Brooks and his copy, at Gallatin, Tennessee, in August, 1862, these keys were abandoned.

Example in No. 7.

Colonel Anson Stager, Washington:*

Austria await I in over to requiring orders olden rapture blissful for your instant command turned and instructions and rough looking further shall further the Camden me of ocean September poker twenty I the to I command obedience repair orders quickly

* For some years, most messages for Washington were addressed to Col. Stager.

pretty Indianapolis your him accordingly my fourth received 1862 wounded nine have twenty turn have to to to alvord hasty.

WILLIAM H. DRAKE.

The above message was written originally from left to right in six columns, using arbitrary words for real ones wherever provided. This made nine lines, which are indicated by the first word, "Austria." To prepare for transmission, as above, the message was written up the first column, down the sixth, up the second, down the third, up the fifth and down the fourth. When thus placed, discarding the tenth or check word at the end of each column, and reading from left to right and translating the arbitraries in this order, the message will read as follows :

LOUISVILLE, KY., September 29, 1862.

MAJ.-GEN. HALLECK, General in Chief:

I have received your orders of the 24th inst., requiring me to turn over my command to Maj.-Gen. G. H. Thomas. I have accordingly turned over the command to him, and in further obedience to your instructions, I shall repair to Indianapolis and await further orders.

D. C. BUELL,
Major-General.

CIPHER NO. 12.

This one was a great improvement on the former. It was adopted some time in 1862, and continued in use until August, 1864. Being the first of a new series, numbered 12, 9 and 10, we will particularly describe it. It contained arbitraries for every hour and half hour of the day and two others each — either of which were used — for the names of all prominent officers, civil, military, naval and Confederate ; also for all important rivers and places likely to be named in cipher messages, besides others for all the States and for words and even phrases in common use in war dispatches. Eight pages were devoted to column and line indicators and routes. The commencement words indicated the number of lines in a message or division of a telegram, and the respective routes in which the telegram or partial message was prepared. The first page of the key was devoted to messages or sections thereof, containing four lines. We find

there the commencement words, army, Anson and action, each of which indicated that the message was of five columns. Three other words on that page indicated four columns, and others six. Each column had a distinct route. The other seven pages were alike in general character, but indicated a greater number of lines. The eighth page route was not by columns, but by number, *i. e.*, each square made by the column lines was numbered, and the words were placed therein according to their key number, counting from the beginning, as explained below, where we examine No. 9.

Stephen L. Robinson, cipher operator, accompanied General A. J. Smith on his march against Forrest, and was captured by guerrillas, while returning, when number twelve cipher key was taken from him. This was in July, 1864, and in consequence the key was very soon after discarded.

EXAMPLE.

To George C. Maynard, Washington

Regulars ordered of my to public out suspending received 1862 spoiled thirty I dispatch conmand of continue of best otherwise worst Arabia my command discharge duty of my last for Lincoln September period your from sense shall duties the until Seward ability to the I a removal evening Adam herald tribune.

Philip Bruner.

It will be observed that there are fifty-one words in the above message. It was put up by writing the real message in the usual way, but every word was divided by column lines. So written, it appeared to the operator putting it into cipher that, as he had adopted a five-column plan, he had nine lines, or forty-five words. By referring to his key, he found that regulars, Rosecrans or run, would advise the translating operator the number of lines and columns in the message, and also the route up and down those columns; hence, one of those words, regulars, for instance, is adopted as the first word of the cipher, and the route order is then followed, up the fourth, down the third, up the fifth, down the second, and up the first columns. At the end of each column a blind word is added, making in the message fifty-one words in all. The translator, having blocked out

five columns and nine lines, and, in the route order indicated written down all but the blind words, and translated the arbitraries by the key, finds that the message reads from left to right as follows:

LOUISVILLE, KY., Sept. 30, 1862.

GENERAL HALLECK:

I received last evening your dispatch suspending my removal from command. Out of a sense of public duty, I shall continue to discharge the duties of my command to the best of my ability until otherwise ordered.

D. C. BUELL,
Major General.

There is one feature about No. 12 which has not been described, and which, as it appertains also to 10 and 9, may be explained here. It consists of a change of route by which the message was ciphered. A reformed gambler chanced one day, on a railroad train, to explain to Colonel Stager how he could always tell any card withdrawn from the pack. By committing to memory the following letters and figures: K 842 W 795 M 361 B; or, as the ex-gambler stated it, "The king had 842 women, 795 men and 361 boys," the key to the trick is preserved. Each of these nine figures represents a spotted card, except 1, which means ace; boys, means ten spot; women, queen, and men, Jack. The pack is arranged by placing the cards of each kind in their order, as above, and the whole together alphabetically, thus: clubs, diamonds, hearts and spades are put together in this order, after being arranged in the order of kings first, eight spot second, four spot next, etc. As these cards are systematically arranged, it is easy for any one knowing the plan to run over the deck until he finds a card missing and state its name, or, upon seeing the card itself and not the others, to name those it lay between. It occurred to Colonel Stager to utilize the idea above developed, in his cipher system, and as a preliminary thereto, he used it in his own telegraphic correspondence with Major T. T. Eckert and others in the war office, as follows: $\overset{13}{\text{K}}\ 842\ \overset{12}{\text{W}}\ 795\ \overset{11}{\text{M}}\ 361\ \overset{10}{\text{B}}$, using "Jack" as a key word.

ILLUSTRATION.

Jack arrival home me going please on to-day's am express there meet on I.

If the reader numbers each word, beginning with "arrival" and places each numbered word in the order of the key figures, the message will read, "I am going home on to-day's express. Please meet me on arrival there."

13 8 4 2 12 7 9 5
11 3 6 1 10

This idea was further developed, and incorporated into these three ciphers, distinctively, but in principle, as shown by one, as follows :

MESSAGE OR DIVISION OF SIX LINES.

Stanton, McClellan, McDowell } Each meaning six columns.

SIX COLUMN ROUTE.

×			×	×	×
6	17	27	36	26	16
7	5	28	35	25	15
8	18	4	34	24	14
9	19	29	3	23	13
10	20	30	33	2	12
11	21	31	32	22	1
×	×	×			

EXAMPLE.

WASHINGTON, July 15, 1863.

To W. G. FULLER, Memphis, Tenn.:

Clara McClellan, *applause query* spare safe occupied for present sufficiently your forces prentiss if the *world valley* the render have caught bear line you to he hard *chorus* to all to *zebras* run if the can operate *wafers* lean towards on send *wiley blubber* up.

T. T. ECKERT.

Standing "Clara" aside as representing 10:30 A. M. (girls' names were used to indicate time, and usually preceded the key term), we discard "McClellan," the key word which discloses the particular route and number of lines, and beginning with "applause," insert the words in their order in the respective squares as numbered, discarding, however, one blind or check word wherever × follows a number.

The result, after translating arbitraries which are printed above in italics, is as follows :

WASHINGTON, 10:30 A. M., July 15, 1863.

For GEN. S. A. HURLBUT, Memphis :

If Gen. W. T. Sherman's movements have sufficiently occupied the enemy to render your line safe, send all the forces you can spare to Brig.-Gen. Prentiss to operate on Price's rear if he advances towards Missouri. (Signed) H. W. HALLECK,
Maj.-Gen'l.

CIPHER NO. 9.

In January, 1863, it was, for prudential reasons purely, deemed advisable to substitute at the chief points and head-quarters in the Western Departments at least, a new cipher key for No. 12, and therefore No. 9 was arranged and delivered. Thus No. 12 was left in general use, 9 being the particular cipher; No. 10 followed a few months later. S. H. Beckwith, Gen. Grant's cipherer while at Memphis, succeeded, by the use of different colored inks, in making one key-book exhibit all three systems. This was not difficult, as the printed key and arbitrary words were alike (but with different meanings), and by using red ink *all through* for No. 10, blue for 9, and black for 12, the distinction was always evident; thus, "Asia" or "Adam," which in red ink meant "Gen. McClellan," in black meant "Gen. Halleck," and in blue "President Lincoln." In this shape, several copies of these ciphers were subsequently issued by the chief of the Telegraph Corps.

No. 9 cipher complete is shown in Appendix.

CIPHERS NO. 1 AND 2.

No. 1 cipher supplanted No. 9, and it is probable that more important telegrams were sent in it, than any other. It was made in 1862, but did not come into general use until February, 1864. September 24, 1864, when operators Pettit and Ludwig were captured at Athens, Ala., Confederate Gen. Forrest obtained a copy, after which this number was discarded. It consisted of twenty-five pages of the usual size, *i. e.*, about the size of a bank book. One page was filled with time arbitraries; six, with line indicators and column routes. Each page contained nine words, either indicating the same number of columns and

the one route on such page, but there were duplicate sets of line indicators on each page; thus, on one page, "dunce" and "snuff" meant one line; "charge" and "gold" ten lines, etc. Besides the column and route indicator, two words were added to show the number of lines; hence, if a message was fifty-five words long, the key terms might be "army," (meaning five columns and indicating also the route,) "snuff, gold," *i. e.*, five columns of eleven lines, or instead of "snuff, gold," any other two, which added equaled eleven, could be used; or some word indicating more columns, with two other words meaning fewer lines. In this cipher there were nearly nine hundred arbitrary words. For example, "Adam" meant Maine, "Arno" Arkansas, etc.; "apple" Fort Sumter, "animal" Fort Monroe, etc.; "Berlin" Red River, "Attica" Potomac, etc.; "Bologna" and seven other words meant the President, "Bruno" and five others the Secretary of War, etc.; "black" or "blubber" City Point, "empress" or "embrace" Nashville, etc.; "hosanna" or "husband" Jeff. Davis, "hunter" or "happy" Gen. Lee, etc.; "Juno" and five others Gen. Grant, "lady" and three others Gen. Thomas (G. H.), etc. There were, also, arbitraries for arms, brigadier-general, by the way of, cavalry, defeat-ed-ing, movement, surprise, regiment, troops, encountered the enemy in strong force, etc., etc., and finally for numerals. Any extra, blind or check word was added at the end of each column.

No. 2 cipher was arranged on precisely the same principle, differing only in the significance of arbitraries, key-words and line indicators. This was not, however, so generally held as No. 1. One illustration will sufficiently explain both:

EXAMPLE IN NO. 2.

NEW ORLEANS, June 19, 1864.

To ALBERT B. CHANDLER, War Department, Washington:

McDowell unsound vessel period was pine squad also store this nay of Russell hot ginger revenue for leave to brocade this each revenue at wonderful feat your tulip at yacht Egypt assistants to revenue tulip flower Baker violet side date houses at of by former he cant audit bale they in possibly quack about sun bale mason Saint Luke f burning shreve byrne and party place F shreve Fremont Dayton law cipher Austin black at picked proposes a

happy marriage Cupid made fork French etc. and or in about same port T yardstick wilby Honduras and port the T Morgan sailed for Peru spit with boats fraction Arnold male lie is *volunteers resist surprise* sometimes good Stephen of a on Ben freckled or clear Downing swallow recently Stephen little nose hand deal they feel hot poplar spits inside the above scars stop slim George Clarke phased has probably and sulphur of a close call Windham all thum head ere spit as swallow swallow Jonah inches Browne cut side behind and spit while ware rooms awful in he on at head leave tash slender girl built mouse two topoph also also yacht wilby mastiff flower pistils conversing the four the and so hare high flyer.

(Signed) S. P. Kimber.

"McDowell," the first word, means that the message has ten columns; "unsound" (2) and "return" (8), that it has ten lines. If we, therefore, block out the message in ten columns of ten lines in the route order laid down in the key, discarding a word at the end of each column, the first division of this message, except translating the arbitraries, will be complete. The route is up the fifth column, down the first, up the tenth, down the sixth, up the fourth, down the second, up the ninth, down the eighth, up the third, and down the seventh. At this point we discover other key-words, viz.: "volunteers" (nine columns), "resist" (2) "surprise" (7), equals nine lines, and proceeding as before, but up the second, down the third, up the ninth, down the first, up the sixth, down the fourth, up the eighth, down the seventh, and up the fifth, we find by translating the arbitraries and correctly spelling purposely misspelled words (such as byrne for burn, hare for hair), that the foregoing cipher resolves itself to the startled receiver, as follows:

New Orleans, La., June 19, 1864.

To Gen. Halleck, Washington, D. C.:

Lieut. T. F. Beal, of rebel secret service, made a lieutenant for burning the "Sunny Side" near Memphis, proposes to leave Shreveport about this date with ten picked assistants to burn and destroy storehouses, boats, etc., at Louisville, Cincinnati and St. Louis; possibly also at Memphis and Cairo. This party will be in squads of two or three at each place. They correspond by mail in cipher. Lieut. T. F. Beal was formerly a lawyer at Shreveport, La.

He is about five feet six or seven inches high, light built, slender, slim faced, freckled, light brown hair, light mustache. Has been recently cut so as to leave scars, probably on left side and near top of head, above and a little behind the ear; also at the junction of nose and forehead; also on inside of left hand near the thumb. He spits a good deal while conversing. All will be in citizen's clothes; sometimes they wear pistols.

(Signed) E. R. S. Canby,
Major General.

Copies of the above, were sent to cipher operators, for General Allen at Louisville, General Rosecrans at St. Louis, Admiral Porter at Cairo, the commanding officer at Cincinnati, Generals Washburne at Memphis and Slocum at Vicksburg.

Ciphers No. 3, 4 and 5.

No. 3 was the first of a series of three ciphers, numbered 3, 4 and 5. Quite a number of arbitrary words and their signification used in No. 3 were suggested by S. H. Beckwith, who had carefully noted down many important words and expressions not then represented by arbitraries. In selecting these words, Beckwith was careful to choose those least likely to be mis-sent. Although this matter had not been entirely overlooked, it will be observed that it was of great consequence, inasmuch as telegraphic characters are composed of dots, as in p . . . . . dashes, as in t – l —— 0 —— and spaces, as in o . . contradistinguished from i . . Sometimes the sounder would "stick" on letters, making dashes where dots should appear; thus, p a c i f i c was received at War Department, f a i r f y e. The letter p sounded f, and the receiving operator misconceived most of the other letters. The cipherer in Washington being himself an operator, discovered the mistake, which none but a telegraphist would have done. Although such errors were uncommon, the annoyed translator has been vexed many times by them.

Cipher No. 3 was first introduced December 25, 1864, and was intended for use at Generals Grant's, Sherman's, Thomas's, Sheridan's and Camby's head-quarters at least, but it is believed

it never reached the West, and was, in fact, little used, if at all, after March 23, 1865, when No. 4 was adopted.

No. 4 was the last key used in the war. March 23, 1865, it was sent to Captain W. G. Fuller, at head-quarters, Military Department West of the Mississippi; to S. H. Beckwith, at Grant's; C. G. Eddy at Sherman's and W. R. Plum at Thomas' (G. H.) head-quarters; one other copy being retained at the War Department.

As shown elsewhere, when the sword was returned to its scabbard, the Federal Government reconstructed and operated the Southern lines; but ere long surrendered them to their owners, retaining, however, in its service, certain chosen telegraphers, at a salary of twenty-five dollars per month (where the operators were employed by a telegraph company), and June 20, 1865, No. 4 and *all other* ciphers were discarded, and No. 5 was sent to the following United States military telegraphers: Louis B. Spellman, Houston, Texas, and two others in that State; James E. Pettit, Augusta, Georgia; John C. Gregg, Atlanta, Georgia; W. T. Mason, Cairo, Illinois; A. W. Smith, Columbia, South Carolina; J. W. Wickard, Charleston, South Carolina; J. L. Burucker, with General Dodge on the plains; Theodore Holt, Little Rock, Arkansas; D. Byington, Leavenworth, Kansas; D. O. Dyer, Memphis, Tennessee; Charles Morris, Macon, Georgia; J. D. Congdon, St. Louis, Missouri; C. T. Gross, New Orleans; J. J. Wickham, Nashville, Tennessee, and others at Mobile, Vicksburg and Richmond; and by them retained until they were discharged. We will explain No. 4, and in that way disclose the main points of Nos. 3 and 5, as they differed chiefly in the particular order of routes and meaning of arbitraries.

There were in No. 4, arbitrary words representing the time of day, dates, days, months, year, numerals, punctuation marks, chief officers of the government and of the Federal and Rebel armies, military names and common expressions, as, "I have ordered," "I think it advisable," states, rivers, places, etc.; in all, numbering sixteen hundred and eight arbitraries, exclusive of key words. The key proper, was composed of twelve pages, each differing in the words used and the route employed. There

were no directions in the book for the use of the cipher, which, if captured, would greatly puzzle the possessor.

Page seven entire is as follows:

		3			7			4		2		
8				10		14			12			
		13			11			9				
6				5		1						

Bedroom.	1.	Lazy.	Blonde.	11.	Liniment.
Bedstead.	2.	League.	Bloody.	12.	Lion.
Beverage.	3.	Leather.	Bosom.	13.	Liquid.
Beyond.	4.	Legacy.	Boy.	14.	Loafer.
Big.	5.	Lemon.	Bread.	15.	Log.
Bill.	6.	Lesson.	Bride.	16.	Lomax.
Billiards.	7.	Let.	Brush.	17.	Long.
Bilious.	8.	Library.	Bulk.	18.	Lucky.
Blanket.	9.	Life.	Bushel.	19.	Luscious.
Bliss.	10.	Linen.	Buxom.	20.	Luxury.

The above words are line indicators, only one of which was used unless there were over twenty lines in the message, in which case others were added as required, as in cipher No. 2. To find the route, read the figures in the table above from left to right in the order that they occur alternately in the *upper* and *lower* lines, the two intermediate lines of figures having no connection with the route, being introduced simply to deceive the uninitiated. The upper line of figures denote the route *down* the column and the lower line, *up*. Hence, the route above shown is up the sixth, down the third, up the fifth, down the seventh, up the first, down the fourth and down the second columns. There are always as many columns as the highest figure in the top or lower line.

EXAMPLE.

1.	2.	3.	4.	5.	6.	7.
Incubus.	*Stewart.*	*Brown.*	*Norris.*	*Knox.*	*Madison.*	
Washington, D.C.	July	15th	18	60	3	for
sigh	man	Cammer	on	*flea*		wood
	Simon		Cameron	.	I	would
		Toby	*trammeled*	*serenade*		
give	much	to be	relieved	of the	impression	that
Bunyan	*bear*	*ax*	*cat*	*children*		awl
Meade	,	Couch	,	Smith	and	all
bat			*knit*		get	ties
,	since	the	battle	of	Gettys	
large	*ass*					
burg	,	have	striven	only	to	get
village	*skeleton*	*turnip*			*optic*	*hound*
the enemy	over	the river	without	another	fight	.
					no	
Please	tell	me	if	you	know	who
		Harry	*Madrid*	*locust.*		
was	the	one	corps	commander	who	was
	oppressing	*bitch*	*quail*	counsel		
for	fighting	,	in the	council	of	war
	Tyler	*Rustle*	*upright*	*Adrian*		
on	Sunday	night	Signature	A. Lincoln.	Bless	him.

By reading the alternate lines, the reader will discover the real message, thus shown for convenience. The arbitraries have been italicized. The other upper words are such as an expert inserts whenever he believes that in deciphering, the context must indicate the true word. There are eleven lines in this message. "Blonde" or "liniment" must be the key word. By following the route and adding an extra or blind word at the end of each column, the message thus prepared for transmission would read as follows:

WASHINGTON, D. C.

To A. HARPER CALDWELL,

Cipher Operator, Army of the Potomac:

Blonde bless of who no optic to get and impression I Madison square Brown cammer Toby ax the have turnip me Harry bitch

rustle silk Adrian counsel locust you another only of children serenade flea Knox County for wood that awl ties get hound who was war him suicide on for was please village large bat Bunyan give sigh incubus heavy Norris on trammeled cat knit striven without if Madrid quail upright martyr Stewart man much bear since ass skeleton tell the oppressing Tyler monkey.

(Signed) D. Homer Bates.

Besides the cipher keys above described, there were others called "department ciphers." These were used more extensively in the Department of Missouri than any other. They were nearly as simple as the "old six column" cipher, as the first was sometimes called, and were handled by officers and operators. Tony Walsh lost one of these keys with his pocketbook, and Brig.-Gen. McNeil lost another.

With an occasional exception, the War Department ciphers were manipulated by operators. In the latter years there were no exceptions. This occasioned bitter jealousies on the part of many staff officers, usually the captains and lieutenants. The thought that a non-commissioned man—a mere citizen—perhaps a boy, at that, should be so closely associated with the commanding officer; that the greatest secrets of the general should be communicated to his superior through such a medium, and the staffling remain in utter ignorance of those vital facts, was indeed galling, and consequently provoked numerous embarrassments for the operator. It often happened that these under officers chafed at the refusal of the operator to inform them even in a general way what was transpiring.

The personal staff officer was likely, except during a campaign, to have many idle hours to spend, and however important his services were in the field, he could not but feel much unrest while located in towns and cities, pending preparations for active operations. Wherefore, he sighed for such employment as became his position, and none was so tempting as that which would make him the medium of confidential communications of great military consequence between his general and others.

For some time after the outbreak of the war, army ciphers were put up to some extent by staff officers. Gen. Lander while

in West Virginia under Gen. McClellan, and Capts. Thoms and Thompson at Nashville under Rosecrans, in the winter of 1862–3, manipulated the cipher key then in use. In November, 1862, Generals Grant and Hamilton, it is related, were in close consultation at La Grange, Tenn. Immediately after, Hamilton went to the front, where he received a cipher telegram from General Grant, but after studying it for half an hour, Hamilton required operator Lew Spellman to repeat it, which being done, the repetition accorded with the first transmission. Hamilton could not translate it, and Grant insisted it was correct. Grant soon abandoned the business to his cipher operators. But in December, 1863, the General went to Knoxville, Tenn., without taking his cipherer, Beckwith. En route, Grant received many Washington dispatches, which were to him, certainly no plainer than the hieroglyphs of Egypt or Mexico. Consequently, on his return to Nashville, he directed Beckwith to give a copy of the key to Lieutenant-Colonel Comstock, of his (Grant's) staff. Obedience to this order, brought about an interesting correspondence* between Colonel Stager and General Halleck, and Halleck and Grant, ending in the cipher being restored to Beckwith, and forever settling the question as to who should handle the important cipher keys, in favor of telegraph operators.

The cipher system, originated by Anson Stager, and developed mainly by him, but in no small degree by others, more particulary T. T. Eckert, A. B. Chandler, D. Homer Bates and Charles A. Tinker, was eminently successful. Copies of cipher messages quite often reached the enemy, and some were published in their newspapers, with a general request for translation, but all to no purpose. To the statement that in no case did an enemy ever succeed in deciphering such messages, let us add that neither did any Federal cipher operator ever prove recreant to his sacred trust, and we have, in a sentence, two facts that reflect infinite credit upon the corps. Fidelity is an attribute of the business of telegraphy. However deficient an operator may be in other qualifications, he is invariably to be trusted with any secret that comes to him in the line of his employment. To a natural disposion to merit such a trust, is added a habit or

* See Chapter XI, Vol. 2, Department of the Cumberland, for details.

faculty, acquired by constant, daily experience, of keeping the ears open and the mouth shut.

The following truthful presentation of the case, is found in the *Journal of the Telegraph* for November 1, 1873: "It is now twenty-eight years since the telegraph commenced its mission in America. During all that time, scarcely a charge can be sustained of its infidelity to the hundreds of thousands who have used it. The character of its work so appeals to honor, and so impresses with the idea of a sacred trust, that the telegraph operators all through the land have been faithful. This has sometimes been carried so far that an operator has been known to burn a message rather than expose it, even in a court of justice. [Since then, others have gone to jail rather than do it.—AUTHOR.] This prevalent fidelity has been remarkable. There is deep philosophy in it. It proves that to make men faithful they must be trusted. The exceptions only prove the truth. The public has trusted the telegraph, and its confidence has been honored. It has made a typal character. The average American operator will never divulge a secret committed to him. His very business educates him in honor."

CHAPTER III.

THE UNITED STATES MILITARY TELEGRAPH; ITS INITIAL STATE AND EARLY OPERATIONS.

In the annual report of Edwin M. Stanton, Secretary of War, submitted to Congress, A. D. 1866, may be found the following: "The (United States Military) Telegraph, which attained an extent of 15,389 miles of lines constructed during the period of hostilities, with a total expenditure of $3,219,400 during the war, and $567,637 during the last fiscal year, has been discontinued, the material sold and disposed of, and the employees discharged; only a few confidential operators being still retained for cipher correspondents with commanders of important districts."

Let us inquire into the origin of the extraordinary service, thus briefly summarized.

Military telegraphs, up to the beginning of the war, formed no permanent part of the *corps d'armee* of any nation, except Germany. In the United States, the Army Signal Corps was the only recognized body organized for transmitting intelligence quickly, and from the outset that corps was handsomely supplied, because the *law* warranted it; but the United States Military Telegraph was of slow up-hill growth. It developed from sheer necessity, a necessity so urgent that legal requirements were disregarded, to the manifest service of the Union. Its importance was so self-evident that no man, it is believed, ever ventured to impugn its legitimacy. Necessity is a virtuous mother. For about the first seven months of the war the United States Military Telegraph was without a recognized head. The fallacious idea that pervaded all branches of the Federal Government nearly to its destruction—that the war was a three months' conflict—is chargeable with the delays in effecting a more complete organization of the military telegraph service. Let us examine its fragments, subsequently united into one harmonious whole, and as we note their growth in the various departments, mark also their opera-

tions. But, as an important preliminary thereto, we will first discover the telegraphic facilities afforded by private companies in the several States of the Union, at the opening of the conflict.

At the outbreak of the war there were three great private telegraph corporations; two at least were vying for supremacy. These three, the American Telegraph Company, the Western Union Telegraph Company and the Southwestern Telegraph Company, unitedly, connected all of the cities and a great number of towns of the Union, except in the far West, and even there the Western Union people were busily at work, so that before the winter of 1861–2 communication was perfected overland to San Francisco, Cal. The American Company's lines, occupied that entire region lying east of the Hudson River, and the whole seaboard country along the Atlantic and Gulf from New Foundland to New Orleans, with branches extending interiorly in the Northern States to Albany, N. Y., Pittsburgh and Philadelphia, Pa., and Cincinnati, Ohio; at each of which points it met the Western Union Company's, which chiefly occupied the remaining northern territory, and had its eastern terminus in New York City. In the Southern States, the American met the Southwestern lines at Chattanooga, Tenn., Mobile, Ala., and New Orleans, La., leaving the Southwestern Company mainly to occupy the rest of the South and Southwest, including the States of Texas and Arkansas, beyond the Mississippi River. Louisville, Ky., was the head-quarters of the company and its most north-westerly point. There were other companies, extensive enough for great good, but incapable of long separate existence among such leviathans.

The attack on Fort Sumter, April 12, 1861, having been telegraphed throughout the Union, was universally recognized as a declaration of civil war. If it occasioned joy in Southern homes and evil forebodings in Northern, the telegraphic news that followed hard on the heels of the reported attack, that President Lincoln had called for seventy-five thousand troops and for the assembling of Congress, July 4th, awoke gloomy anticipations in the minds of the thinking Southron, and proved reassuring in the North. Within three days after the call, probably not less than one hundred thousand men were preparing to enter the Union armies, and on the day of its issue,

LIBRARY OF THE UNIVERSITY OF CALIFORNIA.

Senator's Wilson's telegram to Governor Andrew, of Massachusetts, for twenty companies was so promptly met that four regiments, in various parts of the State, being directed to muster forthwith on Boston Common, were there, some that night and the others the next day. That day the brigade was telegraphed for to save Washington; but five Pennsylvania companies — five hundred and thirty souls — having been urged forward by telegraph, preceded the Massachusetts soldiers to the Capital, reaching there at seven P. M. Twenty-four hours' delay, and Washington would have been in the hands of the enemy. The telegraph, railroad and troops unitedly saved the Capital. Without either, Washington was lost. Congress voted thanks to the soldiers. April seventeenth, the Massachusetts Sixth was *en route;* on the nineteenth Harpers Ferry, Virginia, on the Baltimore & Ohio railroad, was captured, and this lost to the Federals the railroad and telegraphic communication to the North *via* that route. The only railroad and telegraph lines leading from the Northern States to Washington left intact were located in Maryland, a State whose loyalty was questioned. This added greatly to the gravity of the situation. Although the secessionists of Baltimore (Md.) were not in a numerical majority, yet they were domineering in practice, and this city, with its ugly disunion mob, lay astride of that remaining route, equi-distant between Washington and Philadelphia.

Late on the nineteenth, a company of militia of the District, on behalf of the Government, entered the Washington City telegraph office, and compelled every operator to vacate the operating room. No message was sent from that office in any direction until noon of the twentieth. Operators in an adjoining room heard Richmond and other Southern offices calling them, and the remarks made in consequence of receiving no reply. On the removal of the troops, Mr. A. Watson, from the War Department, entered the operating room as the first censor of the war. Every message sent or received was subjected to his inspection. The operators were not permitted to converse with others on the lines, and when Richmond inquired why calls were not answered on the nineteenth and twentieth, they were only permitted to reply, "It's none of your business."

A Mr. Sanderson, also from the War Department, soon after relieved Watson.

April 19th, the wires running to Philadelphia worked badly from Washington. The Massachusetts Sixth was fired upon and stoned by a mob, while passing through Baltimore, and about two P. M. a party there rushed into the telegraph office, on the corner of Baltimore and South streets. The leader, armed with a hatchet, demanded that the Northern wire be pointed out to him; but, without waiting, he hurried to a window and severed one of the lines. This was soon after repaired, and a report was circulated, in order to mislead the public, that all the wires had been cut; but, in fact, one or two were crowded all day with government business for Northern points.

On the nineteenth, as stated, all telegraphic communication between Washington and Richmond, Virginia, ceased, creating a silence ominously oppressive. But about ten P. M. of April 21st, the lines north of Baltimore were cut, causing a silence even more portentous. Owing to the efforts to relieve Washington by forwarding troops through Baltimore *via* the Philadelphia, Wilmington & Baltimore railroad to Baltimore, and thence by the Baltimore & Ohio railroad to Washington, a party of militia and Baltimore police numbering one hundred and sixty, under the leadership of Major Trimble, formerly a superintendent of the Philadelphia, Wilmington & Baltimore railroad and subsequently killed in the rebel army, acting in behalf of the Secessionists, essayed to destroy the railroad bridges and ferries on the former route. At this times James A. Swift, a mere lad of fourteen, was telegraph operator at Magnolia, Maryland, twenty-one miles north of Baltimore, and William J. Dealy, another boy (operators were mostly in their teens, in those days), had that month opened a new office at Back River, six miles north of Baltimore. At three A. M., the night mail train from Philadelphia (conductor, Tom Slater) passed Magnolia after an inquiry as to the trouble on the wire. Proceeding as far as Canton, a suburb of Baltimore, Trimble's party captured the train, and boarding it, proceeded northward, capturing young Dealy, who had been at his post fifty-six hours, without sleep. He was one of the first political prisoners of

the war. Swift, at Magnolia, was also taken. Keeping these boys under strict surveillance, Trimble's train moved toward Havre de Grace, intending to scuttle the steamer "Maryland," used to transport trains across the Susquehanna, and on his return, to burn the bridges. But Conductor Goodwin, of a south-bound freight train, reported (mendaciously) that troops were then moving south from Havre de Grace to clear the road; whereupon Trimble returned, burning the "draws" of two bridges and releasing Swift at Magnolia. Dealy was taken to Baltimore, where a futile attempt was made to induce him to join an artillery company organizing for the Confederate service; and Swift walked to Perryville, where he worked an office for Colonel Dare.

ANDREW CARNAGIE.

April 23, a wire was run from the main city office in Washington to the President's mansion.

The rapid concentration of troops and military supplies at Washington now became of gravest consequence. In this trying emergency the War Secretary, Hon. Simon Cameron, had recourse to Colonel Thomas A. Scott, also of Pennsylvania, who had achieved a brilliant reputation as a railroad manager. Scott hurried to the Capital, and ascertaining the requirements of the Government, was not slow to take men from his road — the Pennsylvania — to fill the most important subordinate positions.

Among these was Andrew Carnagie, Superintendent of the Pittsburgh division. He began his business life as a messenger boy in a telegraph office, where he learned to operate. After becoming proficient as an operator, he entered upon railroad duties, meeting with marked success, and ultimately amassed a splendid fortune. Carnagie was compelled to go by steamer to

Annapolis, and thence by rail to Washington, as the secession mob at Baltimore prevented a passage that way. When a few miles south of Elkridge Junction, as he was riding on a locomotive, he noticed that the telegraph wires were pinned to the ground by wooden stakes. Stopping the engine, he withdrew one of them, when the liberated wires knocked him heels over head, and left an ugly wound on his face. As Carnagie was about to take charge of the military railroads and telegraphs under Scott, this may fairly be put down as the first blood shed in the cause, by any member of the Telegraph Corps.

Colonel Scott was soon after made Assistant Secretary of War, but there are no records which show the date, and Colonel Scott himself could not supply it. Doubtless, this position increased his and Carnagie's duties, and David Strouse, another Pennsylvania railroader, was directed to look after the telegraphs. Thus early the latter came under a distinct management, responsible, it is true to Carnagie; but he had too much to attend to not to give Strouse great freedom of action. It was probably in August that Carnagie left, and R. F. Morley took his place.

But to return; one of the first steps taken by Scott was to call to his aid four operators from the telegraph lines of the Pennsylvania railroad — operators who were known to be thoroughly experienced in the work of running trains by telegraph. These operators reported at Washington April 27th, *via* Philadelphia, Perryville and the bay. Their names are David Strouse, D. H. Bates, Samuel M. Brown and Richard O'Brien.

With wonderful energy, the labor of re-opening the B. & O. road was accomplished. Taking operators with him, Scott first moved to Annapolis, Md., where Colonel B. F. Butler had landed with his troops. Soon after, Scott established his quarters at the Relay House, where W. H. Eckman operated, and on Butler's occupying Baltimore early in May, moved to that city. Parties having pushed south from Havre de Grace, the railroad and telegraph once more connected Philadelphia and Washington, to the great relief of an impatient people. In a remarkably short period, the blockade of traffic between Baltimore and Washington was cleared away, and under the thorough system

then organized, the enormous labor of transporting hundreds of thousands of troops and millions of tons of material and supplies, during the succeeding four years of war, was performed in a manner both creditable to the management and satisfactory to the Government.

The first Government telegraph line built, connected the War Office with the Navy Yard. David Strouse and D. Homer Bates were stationed at the War Department. From this time, May 2, Mr. Bates remained at the War Department to the close of the war, in the closest possible confidential relations with some of the executive heads of the Government — evidence of his fidelity, "strong as proof of holy writ." Samuel Brown was sent to the Navy Yard. The Government arsenal was subsequently connected. O'Brien was stationed at the Baltimore & Ohio Railroad depot, in Washington, which for some time was also army head-quarters.

A vision of new realities now appeared. A new factor in war was to be ushered in. Its brilliant achievements were not, however, contemplated. Doubting Thomases there were, but Necessity was also, and she is dictatorial. Colonel Scott invested David Strouse with powers to erect and maintain such Federal telegraphs as should be required by the military authorities at Washington and in the Department of the Potomac, but left him dependent upon the American Telegraph Company for nearly every dollar necessarily expended in building, operating and maintaining such lines. E. S. Sanford was president of that company, and to him, more than any other person, the Government owes a debt of gratitude for furnishing nearly all the funds and supplies used by the corps in that department *for a period of seven months.* Such devotion deserves a record that would perpetuate it, but such records are not kept in times of war, and hence never.

Troops poured into Washington and encamped within a radius of ten or twelve miles of the city. Telegraphic communication between the camps and the War Department being possible, became essential. The number of operators in the service at this time was barely sufficient to work the offices on the Baltimore & Ohio Railroad and the Government city lines. The erection of lines to the camps and the for-

tifications now being built, necessitated an increased force. Many speedily volunteered, generally preferring positions at the front. William E. Tinney, Albert C. Snyder, Jesse Crouse, James R. Gilmore, Charles A. Jacques, M. V. B. Buell, Henry W. Benton, Jesse H. Bunnell, Jules F. Guthridge and N. H. Brown were among those accepted. The capitol building, garrisoned by two regiments, was connected with the War Department line by a loop. May 4, a line was run up the north bank of the Potomac to Chain Bridge, five or six miles from Washington. This picket-post was occupied first by J. R. Gilmore, operator, and a sergeant of cavalry with six men, and subsequently by Jacques and the guard. It was the post of honor, because nearest the enemy. Indeed, too near for comfort, as the rebels were at the south end of the bridge, in plain view of Jacques, who, a boy of sixteen, could easily understand how the cavalrymen might escape if the enemy advanced; but as for himself, being denied a horse, it was more problematical. Communication with Richmond became impossible on the 21st or 22d of May, 1861, after a short interview between certain prominent officers of the American Company, in the middle of Long Bridge, when the wires were cut; but it continued intact between Alexandria and Richmond until the former city was captured.

May 20, the Government seized the dispatches which for twelve months had been accumulating in the principal telegraph offices; the object being to discover who were plotting treason.

After the capture of Alexandria, May 24, the Federal forces, in three divisions, numbering about 13,000 all told, located on the right bank of the Potomac. Jacques, leaving J. W. Smith at Chain Bridge, went to Alexandria and opened an office at Colonel Wilcox's head-quarters, where he remained under Wilcox's successors, Colonel Stone and General Heintzelman. This was the *first* strictly military telegraph office ever erected within the Confederacy, but the office at Arlington House, where Robert E. Lee had resided, was the first one across the river. From Alexandria the line extended to the farthest outpost, near Falls Church on the west. An intermediate office was opened in August at Fort Corcoran, also on the Arlington estate, and about that time at other contiguous points.

At the end of June, the United States Military Telegraph operators were stationed as follows: W. H. Bauer and J. J. G. Riley at Camden Station, Baltimore; Jules F. Guthridge at Relay House, Baltimore & Ohio Railroad; William B. Kress and Crosby J. Ryan at Annapolis Junction, Md.; Samuel M. Brown and Jesse H. Bunnell at Annapolis, Md.; Jesse W. Crouse, O. H. Kinnaman and H. L. Smith at Washington depot; C. H. Lounsberry at the Capitol building. At the arsenal, Richard O'Brien; War Department, D. Homer Bates, T. H. Fonda, Thomas Flesher, Jr., and William B. Wilson; Navy Yard, D. B. Lathrop, John B. Parsons and Thomas S. Johnson; Alexandria, J. R. Gilmore, M. V. B. Buell, and C. W. Jacques; Arlington House (this latter was the head-quarters of General Sanford, commanding officer, and of his successor, General McDowell), H. W. Benton and C. J. Thomas; Camp Upton, R. Emmet Cox and G. Wesley Baldwin; Camp McDowell, Albert C. Snyder and William E. Tinney; Camp Trenton, L. A. Rose and William C. Hall; Georgetown, W. A. King; Chain Bridge, J. W. Smith, N. H. Brown and Hamilton Fitchett. These offices were open day and night. It should not be understood from the above that all of these operators were so stationed during the entire month of June, as they were moved from place to place as occasion required. For example, Gilmore served a short time in the Capitol, War Department, Chain Bridge and Alexandria offices.

Save a dash or two, a reconnoissance or so, and advancing outposts, but little occurred deserving special mention in front of Washington, up to the middle of July, and that little not of telegraphic importance except in the general way, that new offices were required and the force of operators considerably increased, thus greatly facilitating intercommunication between the outlying posts in Maryland, Virginia and the District. Preparations were also made to follow with the line, close upon the heels of the army when it should advance.

General Butler, who occupied Baltimore in May, took command of a new department in Southeastern Virginia, making his headquarters at Fortress Monroe. Arriving there on the twenty-second

day of May, he soon commanded 15,000 troops and had to confront 10,000 to 12,000 Confederates under Huger and Magruder. Fort Monroe contained a mile and a half of ramparts and about sixty-five acres of land within the walls. A part of General Butler's forces, on the day after his arrival, entered Hampton, but retired across the bridge over the Hampton Creek the same day and erected a redoubt on Segar's farm which commanded the bridge and village, and on the twenty-seventh they seized Newport News, at the mouth of the James, and fortified it.

On June 10, 1861, the organization and instruction of a party of signal (U. S. A.) officers was commenced at the fortress. On the twenty-seventh, Fort Monroe and the detached post of Newport News were in communication by signals. These officers were under the instruction and command of Albert J. Myer, of the regular army. Communication was also kept up by steamers plying between these points. But these facilities, good as they were, were not so speedy and satisfactory as the telegraph, and hence in June, James R. Gilmore was sent to this department with men and material for the erection and operation of the United States military telegraph between these and such other points as might be designated. The defeat of the Federals under the immediate command of General Pierce at Big Bethel, June 10, having been followed by the withdrawal of the rebels to Yorktown, nothing prevented the erection of a line from the fort *via* Hampton (twelve miles) to Newport News, where Pierce was stationed —which was accomplished early in July, and resulted in a great saving of time and expense, much to the satisfaction of the commanding general. These several offices were operated by James R. Gilmore, line superintendent, assisted by Richard O'Brien at Fort Monroe, Jesse H. Bunnell and Henry L. Smith at Hampton and John M. Lock and John B. Stough at Newport News.

Perceiving the utility of the telegraph as a new and important auxiliary in war, and discovering that his occupation was in danger of being Othelloed, there awoke in the mind of Major Myer (chief signal officer) an absorbing purpose, *i. e.*, an ambition to consolidate with his signal service the military telegraph —an ambition which, as we will demonstrate in another chapter, resulted in an expensive failure.

General Butler at Annapolis had been told by General Scott

that his powers as department commander were nearly absolute. Occupying a more important position, he now doubtless felt that his powers were very great, and, at the suggestion of Major Myer, he ordered J. R. Gilmore to report to that officer and to conduct the telegraph business in accordance with the rules and regulations to be prescribed by him. Now the distinguished General had the reputation of being a very autocratic and domineering individual, who would not brook hesitation, much less refusal. The guardhouse there closed in on disobedience. Without intending permanent submission (there being no telegraphic communication with Washington at the time), Gilmore accepted the situation *en passant*, and, though reporting to Major Myer, he reported also to his superior, David Strouse at Washington. The rules and regulations of the chief signal officer were duly promulgated to all operators on the line, who were at the same time, *sub rosa*, directed strictly to disregard them, while apparently carrying them out to the letter. The respectful (?) manner in which these rules were received and the complimentary (?) comments thereon may be imagined by those of the fraternity who knew the operators on that circuit. Among the rules was one, that the operators should be known, not by name, but by number; a rule of long standing in State prisons. The chief having given notice of his intention to *inspect* the line, offices and operators, Nos. 1 and 2 (Bunnell and Smith) at Hampton were directed (?) by Gilmore to put their instruments, offices, etc., in good order and to receive their superior with all honors. Of course they did it. *Vide!—En route*, Gilmore lauded his operators and commended the high state of discipline of the corps, the skill, faithfulness and gentlemanly deportment of the operators. But what was Major Myer's dismay on reaching Hampton office, to find it in the direst confusion, and the gentlemanly operators in their shirt sleeves and bare foot, sitting on the floor in a corner of the room playing "seven up" with a greasy pack of cards. They continued their game during the inspection. If a reconstruction of that office was intended, it was not effected, as the next mail from Washington brought instructions from the Secretary of War, defining the *status* of attachés of the United States Military Telegraph, and requesting the General to permit no interference with them.

July 17, Major Myer was directed to report to General McDowell, and the next month he became chief signal officer on General McClellan's staff. Had he been content to attend to the signal service proper, and leave electrical telegraphy to others, much subsequent friction would have been avoided, to the great advantage of the Government.

About the middle of August, General Butler was relieved by General Wool. Up to this time nothing new had occurred at the fortress or its vicinity, of special moment, save that, owing to the defeat at Bull Run, General Butler was obliged to forward a part of his troops to Washington; to reduce his strength at Newport News, and abandon Hampton, which the enemy burned August 7, 1861.

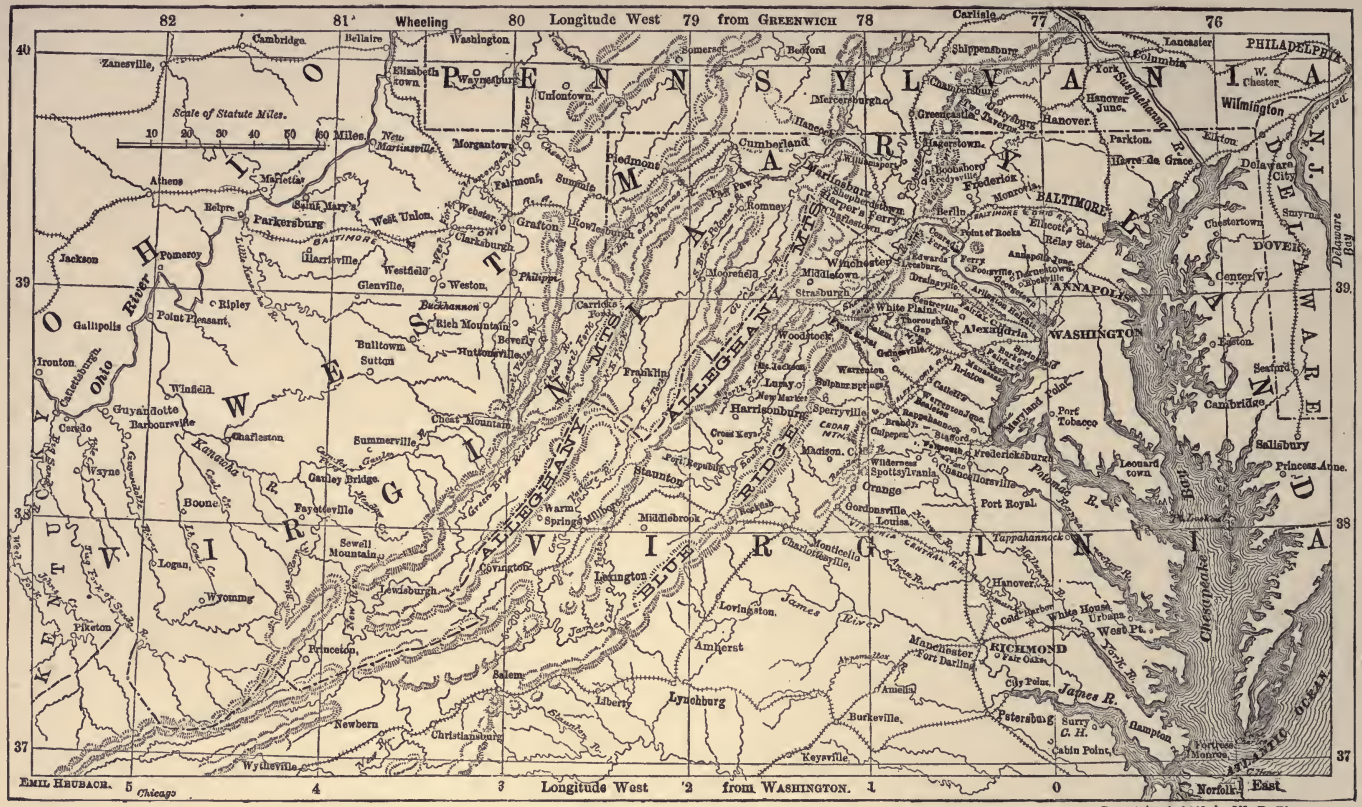
Since the 19th of April, Harper's Ferry, on the Upper Potomac and eighty miles in a direct line from Washington, had been in the possession of armed Confederates. Late in May, 1861, General Joseph E. Johnston assumed command of these and all other forces in the Shenandoah Valley. General McClellan, with head-quarters in Cincinnati, was preparing to invade Western Virginia, and General Robert Patterson was at the head of the Department of Pennsylvania, collecting volunteers at Chambersburg, Pa., where he appeared in person, June 3, 1861, and about the seventh began moving toward the Potomac, which was soon crossed. But, Beauregard having assumed command of the insurgents at Manassas, Washington was oppressed with rumors of his supposed great force and intentions against the capital. Lieutenant General Scott, the chief army officer next to the President, under the evil influence of these oft-repeated rumors, telegraphed Patterson three times for the better part of his troops. He even lost track of Patterson entirely, giving some credence to McClellan's report of Patterson's whereabouts, notwithstanding, he had as late news from Patterson himself, indicating a different location. In response to the third telegraphic order, Patterson badly crippled himself (17th), by obeying instructions; but in a measure his force was restored by other troops reaching him on the 8th of July, and subsequently at Martinsburg, Va., where he lay almost a fortnight waiting for troops and supplies.

Fatal delay! Not to deviate by discussing the *pros* and *cons* of what resulted so disastrously to the Federals, it is sufficient to say that Generals Scott and Patterson seem not to have properly understood one another, owing in a large part to a lack of telegraphic facilities. Telegraphic communication over private lines was complete as far as Hagerstown, Md., and on the Baltimore & Ohio Railroad as far as Harper's Ferry. From these points, or the nearest of them, dispatches were sent by mounted couriers. It was a sad mistake that the telegraph was not advanced with the army.

When General McDowell's forces reached Fairfax Court House on the 17th of July, Beauregard telegraphed the Confederate Secretray of War, who electrographed Johnston by one A. M., of the eighteenth, directing him to bring immediately the greater part of his army to Manassas.

Patterson understood the battle was to have been fought ere this; but McDowell lay two days before the enemy, studying topography, organizing his army, and awaiting supplies. Patterson, claiming to be informed that Johnston's force had been doubled, retired to Charlestown to strike the Leesburg road, which he and his officers regarded as the true route by which to flank and threaten Johnston. Thus Patterson left Johnston at perfect liberty to take whatever troops he chose to Beauregard's aid, and it was about this time that Patterson telegraphed Scott, that his reconnoissances had caused Johnston to be reinforced.

It is somewhat remarkable that on the eve of this first great battle of the war, which would surely determine thousands of men for or against the Union, no adequate means of communication was kept open between Patterson and the War Department. Thus at the vital point in the movements, (July 17 to 22), Patterson received no communication whatever from the General-in-Chief. As Patterson claims to have telegraphed information and for orders during these days, the trouble may have been at Washington City; but it is certain that there was no office nearer Patterson than Harper's Ferry. It would seem that the neglect was in Washington, if it be true as stated by him, that his movements "could at any moment be countermanded by telegraph," and that his first information of McDowell's defeat was three days thereafter, from a Philadelphia paper.


Wheeling
Longitude West from GREENWICH
Longitude West from WASHINGTON.
Scale of Statute Miles.
PENNSYLVANIA
OHIO
WEST VIRGINIA
VIRGINIA
MARYLAND
DELAWARE
N.J.
KENTUCKY
Ohio River
Kanawha R.
Potomac R.
James R.
York R.
Rappahannock R.
Chesapeake
ATLANTIC OCEAN
Delaware Bay
ALLEGHANY MTS.
BLUE RIDGE
Cumberland
Hagerstown
Frederick
BALTIMORE
ANNAPOLIS
WASHINGTON
Harrisonburg
Staunton
Lexington
Lynchburg
Amherst
RICHMOND
Petersburg
Norfolk
Fortress Monroe
Wheeling
Parkersburg
Clarksburg
Morgantown
Grafton
Charleston
Huntington
Ripley
Point Pleasant
Gallipolis
Ironton
Portsmouth
Chillicothe
Zanesville
Cambridge
Athens
Marietta
Pomeroy
Jackson
Logan
Wyoming
Pikeston
Princeton
Newbern
Wytheville
Christiansburg
Salem
Liberty
Buckhannon
Weston
Philippi
Beverly
Huttonsville
Sutton
Summerville
Gauley Bridge
Fayetteville
Sewell Mountain
Lewisburg
Warm Springs
Middlebrook
Covington
Millboro
Warrenton
Culpeper
Fredericksburg
Spottsylvania
Chancellorsville
Orange
Gordonsville
Louisa
Fort Royal
Manchester
Fort Darling
City Point
Amelia
Burkeville
Keysville
Cabin Point
Surry C.H.
Hampton
Yorktown
West Pt.
White House
Urbana
Tappahannock
Leonardtown
Princess Anne
Salisbury
Seaford
Cambridge
Easton
Centerville
Chestertown
Elkton
Havre de Grace
Aberdeen
Delaware City
Smyrna
Dover
Wilmington
Chester
Lancaster
Columbia
York
Hanover Junc.
Hanover
Gettysburg
Chambersburg
Greencastle
Shippensburg
Carlisle
Bedford
Somerset
Uniontown
Waynesburg
Washington
Bellaire
Cambridge
Elizabethtown
New Martinsville
Fairmont
Sumpter
Webster
West Union
Harrisville
Westfield
Glenville
Middlebourne
Moundsville
Wellsburg
Steubenville
Wheeling
Romney
Piedmont
Oakland
Frostburg
Cumberland
Hancock
Williamsport
Boonsboro
Keedysville
Sharpsburg
Harper's Ferry
Charlestown
Shepherdstown
Martinsburg
Berkeley Springs
Bath
Hedgesville
Point of Rocks
Berlin
Monrovia
Ellicott's
Relay Sta.
Annapolis
Annapolis Junc.
Bladensburg
Queenstown
Centreville
Arlington
Alexandria
Fairfax
Manassas
Gainesville
Thoroughfare Gap
White Plains
Warrenton Junc.
Warrenton Springs
Culpeper
Brandy
Rappahannock
Bealeton
Rappahannock Station
Brandy Station
Stevensburg
Culpeper C.H.
Rapidan
Madison C.H.
Wilderness
Chancellorsville
Fredericksburg
Port Tobacco
Maryland Point
Piscataway
Bryantown
Leonardtown
Point Lookout
Fort Monroe
Hampton
Yorktown
Gloucester Point
Tappahannock
Urbana
White House
West Pt.
Cold Harbor
Fair Oaks
City Point
Petersburg
Surry C.H.
Cabin Point
Fortress Monroe
Norfolk
Portsmouth
Suffolk
Franklin
Warrenton
Sperryville
Luray
New Market
Harrisonburg
Port Republic
Staunton
Middlebrook
Warm Springs
Millboro
Covington
Lexington
Lovingston
Amherst
Lynchburg
Liberty
Salem
Christiansburg
Newbern
Wytheville
Princeton
Pikeston
Logan
Wyoming
Gauley Bridge
Fayetteville
Sewell Mountain
Lewisburg
Summerville
Charleston
Huntington
Ripley
Point Pleasant
Gallipolis
Ironton
Portsmouth
Chillicothe
Zanesville
Cambridge
Athens
Marietta
Pomeroy
Jackson
Parkersburg
Clarksburg
Morgantown
Grafton

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA

"Bull . __ . . " Run.

With a heterogeneous army, scarce seventy-five days old, of about thirty thousand troops, most of whom had but two weeks yet to serve, McDowell, obeying General Scott's orders, moved out of his encampments on the 16th of July, 1861, to attack the enemy under Beauregard, numbering about twenty-two thousand, behind works just across Bull Run Creek, Va.

With McDowell's army went, also, the telegraph as far as Fairfax Court House, *via* Falls Church on the Georgetown road, with offices at both places; also, a line on the Orange & Alexandria Railroad, past Springfield and Burke's to Fairfax Station. Rose and one Cummings were the first operators at Springfield. During the night, the pickets began firing, and Cummings, it is said, sought consolation at the relief camp, leaving Rose, who was probably off duty, fast asleep. This was a bad beginning, but the rule of a good ending prevailed. Under Strouse's directions, Paul Connor, Charles Noyes, Dave Carnathan and other builders pushed the lines as rapidly as they then knew how. Considering that the roads were nearly blockaded with troops, artillery, wagons and other impedimenta, fair progress was made.

On the nineteenth, the Springfield office was opened, and on the next day Fairfax Station and Court House offices. Rose opened an office at Burke's Station, at four A.M., on the twenty-first. His office desk, chairs, and other non-essentials, consisted of one rejected railroad tie.

This office was for the accommodation of the Secretary of War, who left for Washington about the time the battle began. Rose then proceeded to Fairfax Station. It is said that Secretary Cameron went to Washington to procure a countermand of the order for battle. Perhaps the Secretary had failed to convince General Scott by telegraph. From the opening of the office at Burke's to the time of the general engagement, there were five hours—time enough, but none to spare. Had McDowell delayed, he would probably have fought that day on the defensive, east of Bull Run. With or without the Secretary's recommendations, it is believed that General Scott, being advised by others, if not by General Patterson, on the twentieth, that General Johnston had gone to Manassas with reinforcements, should have withheld the

attack. But there is almost conclusive proof that General Scott had received the following telegram in time to have staid the attack:

HEAD-QUARTERS DEPARTMENT OF PENNSYLVANIA.
Charlestown, Va., July 20, 1861.

To COLONEL E. D. TOWNSEND,
A. A. G. U. S. A., Washington.

With a portion of his force Jo Johnston left Winchester by the road to Milwood on the afternoon of the 18th; his whole force 32,500.

R. PATTERSON,
Maj. Gen. Comdg.

The offices on these lines were manned as follows: Fairfax Station, by Wm. C. Hall and L. A. Rose; Springfield, C. W. Jacques; Fairfax Court House (being McDowell's head-quarters office), M. V. B. Buell and H. W. Benton.

The battle began at 6:30 A.M., July 21, by General Tyler's firing the signal gun. At nine o'clock it became quite general, and up to about three P.M., victory was with the Federal forces. The Confederates had been receiving fresh troops during the day, but now three thousand or four thousand additional forces from Winchester fell fiercely upon the Federals, and a great victory was suddenly transformed into an alarming defeat. From nine thousand to thirteen thousand of Johnston's troops had produced this disaster.

During this battle and the antecedent preparations therefor, a line of couriers extending from the Fairfax Court House office to the front (ten miles to Bull Run) was established, and General McDowell caused reports of the battle's progress to be forwarded to the office for transmission to the War Department office. These couriers were to arrive every fifteen minutes. At Fairfax Station, Hall became somewhat excited, but remained firmly at his post, where he and Rose did much excellent service; but upon Benton and Buell devolved the greatest responsibilities, which were promptly and efficiently met. Just why the telegraph was not carried on to Centreville, if not to the battle-field itself, it is difficult to state. After McDowell's extraordinary efforts to stay the retreat of his troops had failed and there was no longer any need for the office at the Court House, it was at 1:20 A.M., of July 22, closed.

W. B. Wilson, operating the War Department at this time, describes the scenes there on that memorable (21st) Sunday as follows: "In the telegraph office at the War Department, throughout Sunday, July 21, 1861, were congregated the President, most of his Cabinet, General Scott's staff officers, Col. Thomas A. Scott, and other celebrities of the nation, with maps of the field before them, watching, as it were, the conflict of arms as it progressed. Hour after hour, as the couriers reported our gallant troops steadily forcing the enemy back, hopes beat high, expectation, satisfaction was discernible on every brow, and the cheers of our patriotic soldiery as they fought bravely on were responded to in the hearts of all present. Suddenly, as the the shades of evening were drawing on apace, a lull occurred. Firing could not be heard by the corps of observation. No couriers arrived at Fairfax. What could be the matter? The most plausible reason advanced was, that our army, now victorious, was resting after the hard fighting of that hot Summer day. Every few minutes Fairfax was signaled, but only to receive from the operator the stereotyped reply of 'no news.' An hour was expended, when, like the quick flash of lightning and the stunning crash of thunder, came those chilling words: 'Our army is in full retreat.' The signals now became more frequent, rapid and excited. The retreat soon resolved itself into a perfect rout, and as the telegraph reported to those around it assembled the terrible scenes and heart-rending stories of suffering during that never-to-be-forgotten night, all seemed to feel that the hour of the nation's greatest peril had arrived, and clung instinctively around the cool, clear-visioned President, looking to him for succor. That he gave it is a well-known historic fact, and needs no repetition from me."

General McCann, of New York, was in command at Fairfax Station. General Scott telegraphed him to use his troops to stay the retreat, but it was unavailing.

The operators on the O. & A. R. R. were ordered by the Assistant Secretary of War to remain until authorized to close their offices, when an engine would arrive to take them to Alexandria. "We stayed," says Rose, "until the rear guard ordered us to close." At Springfield, later on the twenty-second, Jacques began to sigh for other quarters. He says: "Colonel Thomas A. Scott

ordered me not to leave Springfield until I had permission from him to do so. After a while the wounded soldiers began passing by, a few at a time, gradually increasing in number, followed by stragglers from different regiments and later by squads and finally by companies and regiments, all in full retreat. Colonel Scott in spite of my endeavors to close the office, still kept me there, telling me, if I left my post, he would have me shot." At this time Jacques thought the whole army had passed, and momentarily expected the rebels; but an engine came at last, to Jacques' great relief, and he, too, at eight A.M., fell back in better order than many Congressmen who had preceded him. Jacques closed his office about the same time that McDowell and his operators entered Washington.

Up to four o'clock, P.M., of the 21st of July, dispatches presaging a great victory were sent North from the War Department. Enthusiasm was unconfined. Sunday was not too hallowed, if God granted victory. But a leaden silence followed until eight, A.M. The War Department had prohibited the transmission of the evil tidings. However, the news-reporter who had seen the smoke of battle and heard the din of conflict afar off, sadly demoralized and laden with cause and effect, monopolizing the private lines, imprisoned the North in a cave of gloom, by reportorially annihilating the Federal army and leaving Washington and Baltimore a probable prey to the Confederates. McDowell, who had much else to answer for, was assailed for fighting on Sunday. In the Southern States the telegraph told the people that fifteen thousand Confederates had utterly routed fifty thousand Yankees. To the North the news was medicine, but bitter as gall; to the South it was champagne, producing a deep and hurtful intoxication. Says Abbott: "Even while our armies were on the retreat from Bull Run, orders were telegraphed throughout the country for large reinforcements. It is said that under the impulse which that disaster created, sixty thousand enlisted in two days." *

And now the army, numbering over fifty thousand men—including, say, fifteen thousand who remained in Washington and troops called from General Butler—spread out on the right bank of the Potomac, and throughout that great body ran nerve lines

* Abbott's History, Vol. I, p. 189.

of telegraph, crossing, looping and re-crossing until the head in Washington City felt every noteworthy pulsation, and by telegraph, electrified, re-organized and re-invigorated it for greater efforts.

In view of an old maxim, "Old men for counsel, and young men for war," General Scott, though nominally retaining command, was substantially superseded, July 25, by General George B. McClellan, who, by the 1st of November, had 134,285 effective troops, and nearly 300 cannon in his army about Washington.

David Strouse.

Nothing so taxes human energies as the necessities incident upon organizing war, unless it be preparing a defense when an enemy is just beyond the gates. David Strouse was chief within his sphere of action, when the Federal Government armed and equipped to repel and pursue the enemy just across the river, and so continued until the roar of their guns ceased to sound threateningly in the streets of the national capital. Whenever the Government wanted a telegraph line built and operated, it wanted it at once, and it was the hardships, the exposures, the responsibilities of such service at Perryville, Ft. Monroe, Washington, Alexandria and Fairfax that, by the month of July, 1861, reduced David Strouse to a shadow of himself. His last work was in stretching a wire across the Potomac, which superinduced hemorrhage of the lungs, weakening him so greatly that he tendered his resignation; but the War Department officers, recognizing his worth, declined to accept the proffered resignation, and in lieu thereof granted him a general leave of absence. A few short months later (November 17), he breathed his last.

Such characters as young Strouse's are not moulded for war, and with him it was truly but a sense of duty that impelled entrance upon its scenes. Few sadder reminiscences are awakened than the story of his life. As one of the first officers of the service in the Department of the Potomac, a sketch of his career might on that account alone be eminently proper, but as his short life was so replete with genuine manliness, such a view of his noble nature is more than historical, because it is elevating also.

David Strouse was born at Mexico Station, Juniata County, Pennsylvania, October 14, 1838. At twelve or thirteen, he left home for Airy View Academy, in Juniata County, where he remained a little more than one year. Thence he entered the academy at Shade Gap, in Huntington County, where he remained about as long. During these years his tutors and fellow students were attracted to him because of his remarkable frankness, truthfulness and manifest unselfishness. Although considered bright and quick at learning, the superiority of his endowments were in the line of great natural goodness of disposition, rather than of intellectual genius. A schoolmate says of him: "His popularity was attributable to his *great appreciativeness*. No one gave him a kind recognition without receiving in return a look of 'I thank you.'" At sixteen, he entered the Pennsylvania Railroad office at Mifflin Station, where he gave a practical illustration of his aptitude at learning. In the brief period of a few months, he "telegraphed by sound." In those days agents often had charge of freights, tickets and the telegraph. The agent at Mifflin, David's uncle, by consent of the officers of the road, carried on, in addition to those duties, a merchandising business. Thus, it became necessary for young Strouse to attend at times to both the store and railroad business, and it is said that David would oftentimes receive telegrams by ear while selling goods at the counter—a feat readily believed now-a-days, but really astonishing at that time, and it brought much local renown to the young "knight of the key."

DAVID STROUSE.

From this point, he went to West Philadelphia, and became assistant to Superintendent G. C. Franciscus, laboring zealously and receiving the commendation of "well done, good and faithful servant," from his employer. It was while here that he connected himself with an evangelical church and joined the noonday prayer meetings and the Young Men's Christian Association. Religion had been the subject of much thought with him, and having decided upon his course, he never faltered, but remained unshaken to the end. At the age of twenty or twenty-one years, he became private secretary to Thomas A. Scott, at Altoona, but shortly thereafter was made Division Telegraph Operator—a position he held when called to more arduous service.

Alas, the sleepless diligence, the incessant change, the hardships and frailties! David Strouse went home to die. While his beautiful life was slowly ebbing, it was his wont to stroll out to the banks of the blue Juniata, guitar in hand, and "drive dull care away," betwixt the purling stream and the sweet strains of his instrument. It was while sitting on the bank, on one of these strolls, that he wrote the following touching lines which were first discovered in his portfolio a few days after his death:

Gentle river, ever flowing,
Where my early days were passed!
Like your waters, I am going
Sadly to the sea, at last—

To that ocean, dark and dreary,
Whence no traveler comes again—
Where the spirit, worn and weary,
Finds repose from grief and pain.

O'er the world, I long have wandered;
Now, a stranger, I return,
Hope, health and manhood squandered,
Life's last lesson here to learn.

Calmly on thy banks reposing,
I am waiting for the day,
Whose calm twilight, softly closing,
Bears the trembling soul away.

On receipt at Washington of the news of Strouse's death, the following notice was issued:

War Department, Washington, Nov. 18, 1861.

To the Members of the U. S. Military Telegraph Corps:

It is with heartfelt sorrow that we are compelled to announce to the corps the death of our superintendent, David Strouse. Ever true to the interests of the Government, attentive to the wants and comfort of his subordinates, kind-hearted and generous to a fault, he died, lamented by all who knew him. His untiring efforts, known to and appreciated by all who were in the corps during the first three months of its existence, served but to hasten the work of the disease which had marked poor Strouse for its victim. He breathed his last at ten o'clock on Sunday evening, and will be buried at eleven o'clock to-morrow (Tuesday) morning. Peace to his ashes.

(Signed) James R. Gilmore,
D. Homer Bates,
W. B. Wilson.

We left the army under General Patterson at Charlestown, in the Shenandoah Valley, off the line of telegraphic communication. On learning of the disaster at Manassas, he retired to Harper's Ferry, where he was, on the 25th of July, 1861, relieved by General N. P. Banks. From July to October, J. R. Gilmore was Superintendent of the Military Telegraphs in the Department of the Potomac. Banks began falling back from Harper's Ferry, and no one knew just where to find him.

On Sunday night, about September 7, Gilmore was ordered by the Assistant Secretary of War, to build a telegraph line to Banks' army. There was not a mile of wire, or a spare insulator, and hardly a keg of spikes, in the department, but it was found imperatively necessary that McClellan and Banks should co-operate, and suddenly discovered that the telegraph only, would make it practicable. President Sanford and Superintendent Westervelt, of the American Telegraph Company, were applied to by Gilmore in this emergency, and the company's supply agents and managers at Philadelphia, Baltimore, Wilmington and New York were telegraphed to forward all they could find. Arrangements were made for speedy distribution along the Frederick (Md.) road to Rockville, thence to Darnestown, Poolsville and Hyattstown. Monday morning Gilmore started on horseback and contracted for the purchase and setting of poles for thirty or forty

miles of line. Many residents were disloyal and refused timber, but Gilmore's authority was held *in terrorem* over them with success. Tuesday morning the line-building began, and Thursday Banks was met over thirty miles from the capital. Considering the lack of material; that the builders were unaccustomed to such work, and that Gilmore, who directed it, was a minor, his progress was remarkable.

The operators stationed on this line, in September and October, many of whom followed the builders and opened their respective offices, were L. A. Rose, at Rockville; William J. Dealey, A. P. Pritchard and R. R. McCaine, at Darnestown; M. H. Kerner, W. T. Lindley and W. N. McInnes, at Poolsville, and William E. Tinney and Albert C. Snyder, at Hyattstown.

Pritchard and Dealey encamped with the builders near Darnestown, and were fairly asleep one rainy night when couriers from General Banks arrived, with orders to open an office at the end of the line. Groping their way in the dark, the boys selected an empty pig-sty, which they roofed with their blankets, and connecting their instrument with the line, they shivered around it all night.

At Darnestown the operators boarded with one Fisher, whose custom it was to fill a tumbler with rum toddy every day at dinner, and pass it around the table for all to take a sip; what was left was Fisher's own. At their first meal with the host, Pritchard chanced to sit at his right, and so was the first to receive the toddy. It is said that, although Pritchard was a temperance man, having taken a severe cold in the pig-pen, and being unaware of the customs of that table, he drank the glass empty, to the utter astonishment of the Fisher family, and evident demoralization of Pritchard himself, who, soon after, quit the service.

Stephen Sargent was another operator who worked on this circuit at Darnestown and Poolsville. Fresh from Port Jervis, N. Y., with his good clothes on, he galloped his horse right merrily over the pike until in view of his first office in the service (Darnestown), when his horse stopped to drink. This horse, being in the Federal service, felt the responsibility of fairly initiating the new candidate into the joys of army life, and by

some unexpected gymnastic feat, pitched his rider, as if from a springing board, into the creek, and dripping from this baptism Sargent entered the telegraph fold.

October 23, a land telegraph cable was laid from Poolsville to Edwards Ferry, where operators C. A. Tinker and J. L. Burucker were stationed. From Poolsville, December 12, 1861, Parker Spring completed the line direct to Point of Rocks, where General Geary commanded. Thomas Armour and Charles Lounsberry operated there. On the nineteenth, their office was under the fire of artillery, one shell falling but twenty feet from it. The operators courageously remained by their instrument, and were the last to leave the place. December 11, Frederick City, Md., office was opened on this line. General Banks had removed there. Frank Drummond operated there until January, when he went to the relief of F. M. Ingram, or C. J. Ryan, one of whom, at Hancock, Md., had become exhausted by long-continued labor during the shelling of that city. The Frederick line was extended, December 20, *via* Williamsport, where N. DeBree operated, to Hagerstown, where T. M. Schnell was operator.

A loop, running from Rockville to Great Falls (nine miles), on the Potomac, was built in September, and Edward Conway was stationed there. A short time before October 8, when C. W. Moore came to assist Conway, a section of Confederate artillery shelled the telegraph office from the Virginia side, but not getting the range at first, Conway escaped. His office, however, was struck many times.

Balls Bluff.

About the middle of August, General Charles P. Stone, commanded a division in the neighborhood of Edward's and Conrad's ferries, Md., with head-quarters in a district school-house, in Poolsville, which was about four miles back from Edward's Ferry. Stone's command was sometimes called a Corps of Observation. At Darnestown, a few miles back, were the quarters of General N. P. Banks. These officers were in direct telegraphic communication with General McClellan. At Darnestown, Wm. J. Dealey, A. P. Pritchard and R. R. McCaine were the operators, and at Poolsville, also in the school-house, M. H. Kerner, W. T. Lindley and W. N. McInnes worked the telegraph.

A great deal of criticism has been indulged in by parties of every calling, but especially by historians, concerning the Ball's Bluff disaster. The author has no disposition to add thereto, as his examination has induced a conclusion that it was one of those accidental happenings which occur in most wars, and which no human foresight could be expected to provide against. When the Committee on the Conduct of the War investigated the affair, it, strangely enough, did not obtain copies of many important telegrams which are here first published, largely with a view of preserving evidence so important.

A reconnoissance in large force under General McCall, by order of General McClellan, was made on the Virginia side of the Potomac, October 19 and 20, reaching out beyond Drainesville, which is about thirty miles south-east of Leesburg, Va. Leesburg is three miles west of Edward's Ferry. McClellan suggested to Stone, by telegraph, that a slight demonstration might have the effect to move the enemy about Leesburg. Pursuant to this, Stone made a demonstration, and in addition twenty men were sent to reconnoitre. Within one mile of Leesburg, a row of trees was discovered, and the moonlight under their lower branches produced a spectre of tents, which Captain Philbrick, the officer in command, reported as a rebel camp, unguarded. General Stone regarded this as exhibiting a want of care on the part of the Confederates, which it was his duty to take advantage of, and directed Colonel Devins, in command on and near Harrison's Island, situate between the ferries and opposite Ball's Bluff, to take five companies as noiselessly as possible, and surprise this camp by daylight. This latter movement was certainly unknown to and unsuspected by McClellan, and Stone himself distinctly states that it was his own order—*i. e.*, it grew out of Philbrick's report. While Philbrick's advance might have been within the spirit of McClellan's instructions, Devin's was merely the result of a complete execution of the telegraphic direction, not in furtherance thereto. That General McClellan had no thought of a battle being brought on by any demonstration Stone should make, is evident from the following telegram received by operator Kerner:

HEAD-QUARTERS OF GENERAL MCCLELLAN, October 20, 1861.

BRIGADIER GENERAL C. P. STONE:

If you desire it, you are authorized to visit Washington for two or three days. Major Clay and family are here.

R. B. MARCEY, *Chief of Staff.*

Because, also, October 21, General McCall's force was permitted to return to Alexandria. General McClellan did not know of the movement of Colonel Devins in time to stop it, nor did he question its propriety at any time, as we shall see; and General Stone was sadly misinformed about the unguarded camp, which, indeed, as we have seen, was no camp at all. Confederate Commander J. E. Johnston, who outranked and superseded Beauregard at the Bull Run fight, had been watching McClellan closely, understanding that he would advance in force *via* Occoquan Creek, on the south, or Leesburg on the right, and General Evans, commanding a Confederate brigade in Leesburg, was doubtless instructed to feel the Federals whenever they should cross, to ascertain if it was a move in force. Accordingly Devins soon found it necessary to retire to the Virginia bluffs overlooking the river, and fight the advancing enemy. It was a little before this that General Stone had given Colonel Baker the immediate direction of affairs across the river, with discretion to retire Devins' force and reinforcements, or to further strengthen the troops. McClellan had telegraphed General Stone, on the twentieth, that McCall "occupied Drainesville yesterday," from which point he would "to-day" send out a heavy reconnoissance in all directions, and directed Stone to keep a good lookout upon Leesburg, "to see if this movement has the effect to drive them away." The dispatch closed, "*Perhaps a slight demonstration on your part would have the effect to drive them.*" It was this innocent sentence that caused the North to bow down in sorrow and humiliation; caused the death of three hundred Federals, including that chivalric statesman and patriot, Colonel E. D. Baker, and the loss of six hundred others.

It is believed that Colonel Baker determined to re-cross the troops, but suddenly changed his mind on hearing that the rebels were about to attack, and, not to allow a few brave men to suc-

cumb in full view of an ample force, he began crossing other troops in a few scows that were poled over. Seventeen hundred men, including Devins' five companies and two or three useless guns, were thus collected on the Virginia shore. Devins was driven back; the skirmishing which began early in the day, culminated in a severe fight about three o'clock P. M., and by five the Federals were completely routed. Many of them were drowned, and others shot, swimming, or otherwise attempting to escape. General Stone testified before the Committee that, if Baker had obeyed his instructions as to position in case he did cross the river, and had otherwise exhibited good generalship, the action would have resulted in a "very pretty little victory;" but as Colonel Baker is dead, General Stone, whose evidence, if it related to a mere matter of contract *inter partes*, would be inadmissible, ought not to be heard against Baker's conduct, so far as it relates to verbal instructions not heard by others.

While the foregoing movements and action progressed, General Gorman, by Stone's direction, moved across, also in scows, a force of about twenty-five hundred, at Edwards Ferry, which was to strike the enemy after Baker had defeated them. As a force, sometimes less and at others more than twenty-five hundred, remained on the Virginia shore about three days, liable most of this time, as was supposed, to be overpowered by the enemy, great indignation was felt against General Stone for thus exposing his troops, but Stone, having forwarded news of the defeat to McClellan, was retiring the Edward's Ferry troops as rapidly as possible, when the following telegrams were received:

McCLELLAN'S HEAD-QUARTERS, October 21.

BRIG. GEN. C. P. STONE, Edward's Ferry, Md.:

Is the force of the enemy, now engaged with your troops opposite Harrison's Island, large? If so, and you require more support than your division affords, call upon General Banks, who has been directed to respond. What force, in your opinion, would it require to carry Leesburg? Answer at once, as I may require you to take it to-day, and, if so, I will support you from the other side of the river from *Darnestown*. (Signed) GEO. B. McCLELLAN,

Maj. Gen. Comdg.

HEAD-QUARTERS OF GEN. McCLELLAN, Oct. 21, 1861.

To GENERAL STONE, Edward's Ferry:

What facility have you for crossing the river at Edward's Ferry, and at Harrison's Island? Is there any road from Seneca to Leesburg, and are there any boats at Seneca? Please direct several mounted men to hold themselves in readiness to carry messages from Poolsville to Darnes*ville*. (Signed) R. B. MARCEY,
Chief of Staff.

McCLELLAN'S HEAD-QUARTERS, Oct. 21, 1861.

To BRIG. GEN. C. P. STONE:

Bremen in send side division shall for gold on you up on take to copper me Adams other a need Camden brass call aid push two river messages lead cipher your of or I whatever tin.

(Signed) G. B. McCLELLAN, *Maj. Gen. Comdg.*

To the above Stone replied that the box was received, but had no key; whereupon the message was transmitted as below, which is a translation of the cipher, except that the cipher directed Stone to "send your messages to me in cipher."

McCLELLAN'S HEAD-QUARTERS.

To GENERAL STONE:

Call on Banks for whatever aid you need. *Shall I push up a division or two on the other side of the river?* TAKE LEESBURG.
McCLELLAN, *Maj. Gen. Comdg.*

It will be remembered that Stone was notified of McCall's presence at Drainesville, where, on the day before (20th) he was to send out a "heavy reconnoissance in all directions." We doubt not that General McClellan was mistaken as to the fact when he testified as follows: Question by Mr. Gooch—"Do you remember whether or not you informed General Stone of the withdrawal of Generals McCall and Smith to their former camping grounds?" Answer—"I think I did." At any rate, having, as we believe, copies of every telegram received about that time by General Stone, we find no message of that purport. Other telegrams are as follows:

DARNESTOWN, Oct. 21, 1861. 5 o'clock.

GENERAL STONE:

We send Hamilton's brigade immediately to Poolsville.

(Signed) N. P. BANKS.

HEAD-QUARTERS OF GEN. MCCLELLAN,
October 21, 1861.

BRIG. GEN. STONE, Edward's Ferry:

Do you learn any results of the action.

(Signed) GEO. B. MCCLELLAN, *Maj. Gen. Comdg.*

HEAD-QUARTERS OF GEN. MCCLELLAN
October 21, 1861.

BRIG. GEN. STONE, Edward's Ferry:

Is the battle still progressing, or has it ceased ?

Signed) GEO. B. MCCLELLAN, *Maj. Gen. Comdg.*

DARNESTOWN, October 21.

BRIG. GEN. STONE, Edward's Ferry:

General Hamilton's brigade has started for you, to await orders at Poolsville. General Banks and division are on their way to Seneca, by orders from Washington.

(Signed) R. MORRISON COPELAND, *A. A. G.*

HEAD-QUARTERS OF GEN. MCCLELLAN, Oct. 21, 1861.

BRIG. GEN. STONE, Edward's Ferry:

Is the enemy in large force before you ? Please give full detail.

(Signed) G. B. MCCLELLAN, *Maj. Gen. Comdg.*

EXECUTIVE MANSION, Oct. 21, 1861.

TO OFFICER IN COMMAND AT POOLSVILLE:

Send a mounted messenger to the battle ground and bring me information from General Stone. I want to know particulars as to result of engagement, and the relative positions of the forces for the night, their numbers, and such other information as will give me a correct understanding of affairs. (Signed) A. LINCOLN.

HEAD-QUARTERS, October 21.

TO GENERAL STONE:

Hold your position on the Virginia side (of) the Potomac at all hazards. General Banks will support you with one brigade at Harrison's Island, or the other two at Seneca. Lander will be with you at daylight. Change the disposition of General Banks, if you think it necessary, so as to send two brigades to Harrison's Island, instead of one. (Signed) G. B. McCLELLAN.

The above was in reply to Stone's telegram that he was withdrawing his troops to the Maryland side.

McCLELLAN'S HEAD-QUARTERS, Oct. 21.

TO GEN. STONE, Edward's Ferry:

Entrench yourself on the Virginia side and await re-inforcements, if necessary. (Signed) GEO. B. McCLELLAN,
Maj. Gen. Comdg.

McCLELLAN'S HEAD-QUARTERS, Oct. 21.

TO GEN. STONE, Edward's Ferry:

I repeat to you, under no circumstances abandon the Virginia shore, but entrench yourself. Hold your own, if you can make your men fight. You will be supported by General Banks.
(Signed) G. B. McCLELLAN, *Maj. Gen. Comdg.*

HEAD-QUARTERS OF McCLELLAN, Oct. 21.

TO GENERAL STONE:

As General Banks will join you, his rank will entitle him to the command, and he has been instructed accordingly.
(Signed) GEO. B. McCLELLAN, *Maj. Gen. Comdg.*

HEAD-QUARTERS OF GEN. McCLELLAN, Oct. 21

BRIG. GEN. STONE, Edward's Ferry:

An advance from Drainsville can not be made to-morrow morning, so that you must rely exclusively upon the support General Banks can give you. (Signed) GEO. B. McCLELLAN,
Maj. Gen. Comdg.

HEAD-QUARTERS OF GEN. MCCLELLAN, (*no date.*)

To GEN. BANKS, Edward's Ferry :

You will entrench your command on the Virginia side of the river, observe the movements of the enemy closely, and report to me often, but make no movements without first communicating with me. GEO. B. MCCLELLAN, *Maj. Gen. Comdg.*

HEAD-QUARTERS, WASHINGTON, Oct. 23.

To GEN. MCCLELLAN, Edward's Ferry :

I have ordered Generals McCall, Porter and Smith to be ready to make a movement on Drainsville early to-morrow morning. Have also ordered reconnoissance by Generals McDowell, Smith and Franklin towards Fairfax Court House and Anandale. All quiet in front. (Signed) R. B. MARCY.

Mr. Lincoln was always keenly solicitous upon occasions of victory or defeat. If reports came to him, requiring the attention of the General-in-Chief, or if he became apprehensive of evil, or for any other cause, felt it important to see that officer, he frequently went to his quarters regardless of the time. One morning when McClellan's head-quarters were in Com. Wilkes' house, on the corner of I and 16th streets, the President called there to consult with the General, although the hour was four, A. M., and it was raining and dark. He came alone. Operator Wilbur F. Holloway was on duty. Mr. Eckert was awakened to escort the President to McClellan's room overhead. Perhaps it was this knowledge of the President's anxiety that induced McClellan, before returning from Edward's Ferry where he went soon after the Balls Bluff affair, to telegraph Mr. Lincoln that no "blame attached to General Stone. The men fought nobly, but the force was only 1,800 against 5,000 or 10,000. General Stone's orders were not carried out on the right."

Including the lines already indicated, there were erected prior to October 31, 1861, in this department and about Ft. Monroe, 280 miles of telegraph, on which were fifty stations, worked by eighty-three operators. These offices were mostly open day and night. The total expense, from April 25 to November 1, 1861, was, gross, $40,752.23.

CHAPTER IV.

EARLY OPERATIONS IN WESTERN VIRGINIA.

The day that Beauregard's guns opened upon Fort Sumter (April 12, 1861), Anson Stager, General Superintendent of the Western Union Telegraph Company, located at Cleveland, Ohio, was telegraphed by Governor Dennison of that State, to meet him at Columbus. Arriving there, he was requested by the Governor to undertake the management of the telegraphs in Southern Ohio, especially along the Virginia line, and to assist Captain George B. McClellan, who, it was then understood, would be the commanding officer of a department which would include Ohio. Stager consented. That was the beginning of those arduous and responsible duties which none could then have foreseen, the able performance of which made for Mr. Stager a national reputation that he may be justly proud of. He repaired to Cincinnati to consult with McClellan, and began preparations to meet the requirements of that officer.

The principal towns and cities of Southern Ohio already enjoyed the advantages of the telegraph. Communication by wire and rail along the route of the Baltimore & Ohio road was intact from Parkersburg and Wheeling to Washington. This road, from Baltimore, reached the banks of the Potomac at Point of Rocks, Md., sixty-five miles from that city and fifty-one by highway from Washington, and, following up the river twelve miles, entered Harpers Ferry, already historic in consequence of John Brown's armed efforts against slavery. Running thence westerly, nineteen miles, it reached Martinsburgh, near which point is the north-easterly corner of West Virginia, which, in June, was carved out of the Old Commonwealth. Pursuing its course nineteen miles further to Cherry Run, and thence thirteen more miles, it once again struck the Potomac, which it followed to Cumberland, Md., sixty-five miles. Rowlesburg, W. Va., seventy-five miles more, is twenty-seven miles from Grafton,

where the road branches; one division leading northwest *via* Fairmont to Wheeling, one hundred miles, and the other past Clarksburg and West Union C. H., one hundred and four miles, to Parkersburg; both *termini* being on the Ohio River. This wonderful road, a master-piece of engineering, about 395 miles long, passing some of the grandest natural scenery on the continent, was destined to play a star part in the great tragedy of war. The wonder is that it cut any figure at all, and it is almost past comprehension that the air lines of telegraph along its route were permitted to stand a week at a time in the wilds they traversed.

Captain George B. McClellan was, on the 14th day of May, 1861, appointed Major General and assigned to the command of the Department of the Ohio, with head-quarters at Cincinnati. His department included Western Virginia, Ohio, Indiana and Illinois, and, later, Missouri.

Mr. Stager's first written authority over the telegraph lines for military uses, reads as follows:

HEAD-QUARTERS OF THE DEPARTMENT OF THE OHIO,
CINCINNATI, O., May 27, 1861

GENERAL ORDER, No. 13.

Mr. Anson Stager is hereby appointed superintendent for military purposes of all the telegraphic lines within the Department of the Ohio, and his instructions will be strictly obeyed.

By command of Maj. General McClellan.

N. H. MCLEAN, *Asst. Adjt. Gen.*

Had there been less patriotism among the telegraph stockholders, some discontent might have been generated, owing to this sweeping authority; but there seems never to have been any trouble with any Northern telegraph company, and none to speak of with any other. It was seldom required actually to possess any telegraph office in the North. For the most part, military control of private lines was merely nominal—not for want of power or authority, but because a hearty co-operation made unnecessary the exercise of an arbitrary supervision. Nevertheless, there was no little embarrassment in Mr. Stager's position, owing to his being a mere citizen and a superintendent of a private company, whose business antagonized that of the telegraph

companies in West Virginia, where McClellan was first to operate and where positive control of the telegraph was impending.

But there was a stranger discouragement. Some of General McClellan's staff officers, perhaps thus early imbued with pangs of jealousy — perhaps sincerely impressed with the idea, conceived the notion that the telegraph could not be useful in war. These officers seriously decried all efforts to introduce it; but General McClellan had great faith in its ultimate efficiency, and insisted upon fairly trying it

For some years prior to the beginning of hostilities, T. B. A. David had resided in Wheeling, Va., and, when the war began, was manager of the telegraph office in that city. About April 20, 1861, Mr. Stager, having advised David that W. H. Seward, Secretary of State, was exceedingly anxious that any information touching the rebels encamped at Harpers Ferry, should be communicated to him, David kept a sharp ear on the line over the B. & O. R. R., and in furtherance of his object, arranged a cipher code with George M. Deetz, then and ever since, operator at Cumberland, Md. B. F. Kelly took command of the First Regiment of Virginians (Union), at Wheeling, May 26, 1861, and seized the telegraph office there; whereupon, Anson Stager appointed Mr. David to the charge of the line of the B. & O. R. R. proper, from Wheeling to Cumberland. David, a zealous patriot, entered upon an untrodden field; but he had an able co-adjutor in W. G. Fuller. At the outbreak of the rebellion, Mr. Fuller was superintendent of the telegraph lines from Grafton, Va., to Cincinnati, Ohio, which ran along the B. & O. and the Marietta & Cincinnati railroads.

In May, 1861, the Confederates, under Colonel Porterfield, possessed themselves of Grafton and its telegraph office. Colonel James B. Steedman's Fourteenth Ohio Volunteers and Captain Barnett's battery were hastened by telegraphic instructions to the protection of Parkersburg.

Fuller was then summoned to meet Mr. Stager at General McClellan's house in Cincinnati on the 27th of May, where he was instructed in the mysteries of the first army cipher ever used telegraphically in war, and was also appointed to manage the Government telegraphs on that branch of the B. & O. R.R. which lies between Grafton and Parkersburg.

Let us now follow Fuller and David in their efforts to connect Wheeling and Parkersburg, *via* Grafton. May 28, Fuller and Colonel Lander, McClellan's chief-of-staff, a regular army officer, just from the Indian country, reached Parkersburg. That night was pitch-dark, and Lander, intent on some kind of adventure, sought to gratify his wish by frightening Fuller. Colonel J. B. Steedman's command had the day before started out on the line of the railroad, and Fuller was in the telegraph office watching for dispatches from the advance, when firing was heard across the Little Kanawha, which, at this point, enters the Ohio. Soon after, Lander entered, and apparently much alarmed, asked Fuller if he was armed. Fuller had no arms. Lander felt sure they were attacked, and wanted some one to go with him to see what the firing meant, and, handing Fuller a pistol, asked him to follow. Fuller, taking the weapon, followed through a long, dark depot to the bridge and across the river, when Lander laughingly remarked that Fuller was not badly frightened, and that he merely wanted to try him. Thus was the Superintendent baptized with fire, even as Prince Napoleon was, at Saarbruck, only Fuller could not find any little bullets to make soldiers weep over.

Many bridges and the telegraph being destroyed, progress toward Grafton was slow, but June 18, the lines were intact to Clarksburg, and twentieth, to Webster, where David was met. Troops left Wheeling May 27, Colonel Kelly commanding. The bridges at Mannington had been burned by Bill Thompson's forces.

Reaching there at four, A. M., next day, David was ordered to proceed immediately to Fairmont. Filled with apprehensions of danger he took a squad of raw troops, and pushing on, soon discovered that his greatest peril consisted in his green and awkward defenders, who made him fearful of being accidentally shot. He reached Fairmont at nine, A. M., the twenty-eighth, when communication was opened through to Wheeling.

A temporary bridge having been erected at Mannington, Colonel Kelly's command arrived at Grafton, May 30 ; the rebels having decamped with the telegraph instruments. David then took a special train east twenty seven miles and cut the line at Rowlesburg, by Colonel Kelly's order, and returned at once to Grafton. General T. A. Morris soon arrived and assumed com-

mand, his force amounting to seven or eight thousand men. May 20, David was ordered west to meet Fuller's party, already long overdue. Taking desperate if not foolhardy chances, he boarded an engine, and, going in the face of trains known to be somewhere on the road, which is very sinuous, he pushed ahead, around sharp curves, through tunnels, one of which was nearly a mile long, until, fortunately, without accident, he met Fuller at Webster, and communication was fully re-established.

David had taken the precaution to procure, at Wheeling, the form of an oath to be administered to operators along the line, who accepted service in the Telegraph Corps. The following is copied from an original:

You do each and all swear to be true and faithful to the United States of America; that you will faithfully transmit all orders and information touching the military operations of the United States of America truthfully, and, further, not to transmit any information, directly or indirectly, to the Confederate States, or any representative or individual of said States, and in no wise prevaricate any information touching the military operations of the United States of America.

JAS. G. NESBITT,
GEO. M. DEETZ,
FRANK MILLER,
P. A. STIDHAM.

Sworn and subscribed before me, this 10th day of June, 1861.
O. H. W. STULL, *J. P.*

It soon became customary at Fairmont to make every one in that neighborhood, suspected of disloyalty, take the oath of allegiance, and David having taken several operators before the Justice there, to make oath as above, that judicial innocent caused all suspected residents to subscribe and swear to the telegraphers' oath.

Colonel Porterfield (Confederate) on quitting Grafton at Kelly's approach, fell back to Phillippi, fifteen miles south of Grafton and about eleven miles from Webster, the nearest telegraph point. General McClellan having ordered the surprise and capture of Porterfield's forces, variously stated as numbering from eight hundred to two thousand, Colonel Kelly took a route twenty-two miles long, leading south-westerly into Phillippi, and was to gain Porterfield's rear, while Colonel Dumont, accompanied by Lander, approached (June 3) Phillippi with his

forces in front. Dumont was a little too quick, but the enemy was considerably punished, especially by Kelly's troops, who struck them in retreat. About this time Mr. Stager arrived and proved an inspiration to the service. Under Fuller and David, the telegraph was extended from Webster to Phillippi, but was soon abandoned.

June 8, Colonel Lew. Wallace and his brave regiment of Indianians reached Grafton, *en route* for Cumberland, Md. On the eleventh they attacked the enemy at Romney, said to be about twelve hundred strong, driving them sixteen miles, and then retired to Cumberland, and encamped. Cumberland was now in telegraphic communication with Grafton, and so remained until June 20, when the enemy, four thousand strong, entered Piedmont, on the B. & O. R.R., after which for some weeks Cumberland was isolated from the telegraphic world.

After the battle of Phillippi, McClellan was busy until July 10, preparing to advance south from the railroad, and Stager was actively engaged concentrating supplies for Fuller and David, who were organizing building parties to undertake a novel experiment—that of following an army with the electric telegraph. Owing to the disparaging remarks of regular army officers; to the dangers incident to the undertaking; to the military importance of success, and the difficult roads, Mr. Stager and his assistants justly felt that they were shouldering grave responsibilities, which nothing short of a successful demonstration could lighten. Porterfield had been superseded by General Garnett, who made his head-quarters at Beverly, fifty-eight miles south-east of Clarksburg. His troops, numbering about ten thousand, were posted, mainly under Garnett's personal supervision, on Laurel Hill, a little out of Beverly on the Phillippi road, and the remainder, except small outlying detachments, under Colonel Pegram, on Rich Mountain, within easy support —say three miles from Garnett's position. At this time (July 4) McClellan had between twenty thousand and thirty thousand men under him. On the 23d of June, he took command in person at Grafton. Detaching a force under General J. D. Cox, to watch General Wise in the Kanawha Valley, McClellan advanced, early in July, from Clarksburg *via* Buckhannon, with the main body, and the first field telegraph that ever advanced

with an army, in America, kept pace with this one. For the first fifteen miles or so, the builders, being troops detailed for that purpose, were under Mr. Fuller's direction and subsequently, until Beverly and Huttonville were reached, under Mr. David. Buckhannon, twenty-eight miles, was reached on the fifth.

At this point the telegraph service was highly complimented by General McClellan's staff—notably by Captains Saxton, Chief Quarter-master, and McFeeley, Chief Commissary, who openly declared that, but for the telegraph, the army would have been delayed many days at Buckhannon. This well-earned acknowledgement was a triumph in itself.

Leaving Buckhannon July 8, the telegraph men kept close up with the army, reaching a point within two miles of Rich Mountain on the ninth. The battle of Rich Mountain was fought on the eleventh. David had just reached the fortifications the defeated enemy had occupied the day before, and opened an office, when a Confederate prisoner marching by noticed the office and exclaimed to his comrade, "My God, Jim, here's the telegraph!" Garnett and Pegram, now in full retreat, abandoning cannon, tents, camps and wagons, sought to reach Beverly before McClellan could intercept their line of retreat to the Shenandoah Valley by the road to Staunton, but in this they were too late. Garnett turned northwardly, but was overtaken and killed at Carrick's Ford. Most of his command escaped to the mountains.

An office was opened at General McClellan's head-quarters at Beverly, on the fifteenth, and the line continued as far as Huttonville, when operator J. L. Cherry arrived to assist E. B. Bryant, at McClellan's. Bryant extended the line to the top of Cheat Mountain, where he remained with the troops until the following Spring, when, crippled by rheumatism contracted from great exposure in the service, he was obliged to go home.

McClellan's troops having won the first real victory of the war, the Northern people were greatly elated by his telegram, dated the thirteenth, wherein he reported his successes. He also issued a congratulatory order to the troops, which was probably the first order ever printed in a portable printing office, regularly connected with an army on a campaign.

While J. L. Cherry worked nights in a railroad office in Cleveland, Mr. Stager noticed that the operator, to occupy use-

fully many tedious hours, busied himself at his font and press. Stager, pleased by such industry, recommended Cherry to McClellan, as doubly useful, *i. e.*, as operator and printer. McClellan caused the Government to buy the type and press, and Cherry was duly installed in head-quarters' office, where he served with distinction as telegrapher and typo. The second order thus printed antedates the first. They are as follows:

HEAD-QUARTERS ARMY OF OCCUPATION, WESTERN VIRGINIA.
BEVERLY, VA., July 16, 1861.

SOLDIERS OF THE ARMY OF THE WEST:

I am more than satisfied with you. You have annihilated two armies, commanded by educated and experienced soldiers, entrenched in mountain fastnesses, fortified at their leisure. You have taken five guns, twelve colors, fifteen hundred stand of arms, one thousand prisoners, including more than forty officers. One of the two commanders of the rebels is a prisoner; the other lost his life on the field of battle.

You have killed more than two hundred and fifty of the enemy, who has lost all his baggage and camp equipage. All has been accomplished with the loss of twenty brave men killed and sixty wounded, on your part. You have proved that Union men, fighting for the preservation of our Government, are more than a match for our misguided and erring brethren; more than this, you have shown mercy to the vanquished. You have made long and arduous marches, often with insufficient food, frequently exposed to the inclemency of the weather. I have not hesitated to demand this of you, feeling that I could rely on your endurance, patriotism and courage. In the future, I may have still greater demands to make upon you—still greater sacrifices for you to offer. It shall be my care to provide for you to the extent of my ability; but I know now that by your valor and endurance you will accomplish all that is asked. Soldiers! I have confidence in you, and I trust you have learned to confide in me. Remember that discipline and subordination are qualities of equal value with courage.

I am proud to say you have gained the highest reward that American troops can receive—the thanks of Congress and the applause of your fellow citizens.

GEO. B. MCCLELLAN,
Maj. Gen. U. S. A., Comdg.

HEAD-QUARTERS, ARMY OF OCCUPATION, WESTERN VIRGINIA.
HUTTONVILLE, VA., July 15, 1861.

GENERAL ORDERS, No. 1.

The Commanding General has experienced much embarrassment during the progress of this campaign, from the want of early information regarding the movements of distant detachments within his command.

The success of the operations of the main column are in a great degree intimately connected with, and dependent upon the subordinate auxiliary detachments; and unless the Commanding General is kept constantly advised of the exact condition of those commands, the service must suffer.

In view of this, it is directed that all commanders of detachments and posts in Western Virginia make daily reports to these head-quarters, showing the true state of their commands, all movements of the enemy and such other information as it may be important for the Commanding General to know.

These daily reports will be forwarded by the most expeditious methods of communication.

By order of Major General McClellan. S. WILLIAMS,
Asst. Adjt. Gen.

General Cox, who left Guyandotte, on the Ohio, succeeded only in pushing back the enemy, and now McClellan, intent on intercepting the Confederates near Gauley Bridge, directed David to return to Buckhannon and construct a line therefrom, westerly, to Weston, twenty-four miles, and also to establish a supply depot, preparatory to following the army. However, on the 20th of July, McClellan heard of McDowell's movement, and decided to await results. On the twenty-first, General Scott telegraphed him to prepare to move against Beauregard, who was retreating, and a change of plans resulted; but the next day Scott notified McClellan by telegraph of McDowell's defeat, nearly in these words: "We have been badly beaten. Our army is in full retreat—a most wonderful transformation of a well-appointed army into a rabble"—and ordered him to Washington immediately.

This left further arrangements to General Rosecrans, the hero of Rich Mountain. These changes, coming rapidly, one after another, caused much comment among high officers in West Vir-

ginia, who gave great credit to the telegraph which made them possible. David, on the twenty-third, was given the management of all lines in West Virginia, and Fuller took charge of all construction matters. The country, as far on the Summerville road as Weston, being within the Union lines, Rosecrans, who had returned to Clarkesburg with the main portions of his army, leaving only sufficient force on the line to Cheat Mountain to protect it, on the 26th of July, directed that the telegraph be constructed to Weston, and that it follow the army, moving along that route *via* Sutton and Bulltown to Summerville and beyond. The General hoped to intercept and capture the enemy who were operating in two divisions, under Floyd and Wise respectively, along the Kanawha.

The country south of Weston was infested with guerrillas, and Fuller was notified by them at Weston that if he proceeded farther with the line, he and his men would be shot, from the rocky hills and mountains along the road. This caused him to call on Rosecrans for an escort, and Captain Theophilus Gaines, with his company of the Fifth Ohio Infantry, was detailed to flank the road as the builders proceeded. At Weston, Fuller received from a Federal captain, scouting in Gilmer County, a little to the west, a message for Rosecrans, which was the first dispatch of military importance sent over this line. It stated that the captain had ascertained that the enemy had received arms, and were marching in large numbers to surround and capture his force; but that he was entrenching on a hill-top and would hold out until aid came. In a moment this reply came back.

SIR: You were sent into the field to become a terror to the enemy, and not to be terrified by them. March out of that entrenchment and disperse those rebels, and report at these head-quarters.

(Signed) W. S. ROSECRANS, *Brig. Gen. Comdg.*

August 13, near Imboden's, Fuller was telegraphed: "Proceed with line cautiously. Tell Captain Gaines to scout well in front until you arrive at Bulltown." At Bulltown he was halted to await the arrival of troops and to forward dispatches to Colonel Smith, who, it would seem, was somewhere in advance. While he was here, about a mile of the line near Imboden's was carried

away. Imboden was the father of the Confederate general of that name. Captain Gaines and Mr. Fuller questioned Imboden about the wire, but he professed innocence. He was given until ten A. M., the next morning to return the wire, as otherwise, he was told, his house would be destroyed and he shot if found, and further, that there would be no houses or inhabitants left in that neighborhood if the line was interfered with. Next morning the wire was easily found near by and not again disturbed in that vicinity.

Sutton was reached on the twenty-eighth. The telegraph party awaited the arrival of General Rosecrans, who left Clarksburg August 31, E. O. Brown, a discharged three months soldier, and J. L. Cherry accompanying him. At Sutton, Rosecrans requested Cherry to remain a few days, but his stay proved quite permanent. A Mr. Brown, commonly called Colonel, operated at Bulltown and became a terror to the people in that section, although he never hurt any one. His frequent and dextrous handling of a harmless revolver awed the natives. One day, six or eight bushwhackers captured the Colonel and required him to take an oath to *support* the Southern Confederacy until exchanged. Brown, by way of compromise, tendered his pocket-book, containing all his worldly goods, viz.: a collar-button and a little poem on Cupid, but a few squirrel rifles aimed at his head made him change the proposition to "Well boys, I can not buck against such forcible arguments as those; I will take the oath, but I tell you candidly that I can not support myself, much less such a needy concern as the Confederacy." The Colonel somehow saved his instrument, which he continued to operate.

Fuller and Gaines, pushing on towards Summerville, were preceded by the advance, consisting of but two companies. These having halted nine miles from Sutton, refused to proceed, and Gaines with his company only, scouted the road until near Big Birch River ford, when Fuller was informed that the enemy were just ahead, and that their pickets had left the place where Fuller then was, but two hours before. Thereupon, connecting his instrument, Fuller telegraphed the facts and also that the two companies had refused to proceed. He received the following reply: "Keep your teams hitched ready to fall back at a moment's notice, and await orders." Then the line was cut in the

rear, and Captain Gaines and Fuller, while watching the enemy down the mountains, disposed their men for the best defense possible. Some of the men wanted to fire on the enemy, but it was deemed imprudent. The next noon, Rosecrans dined there with Fuller and Gaines.

This place is by road about sixteen miles from Sutton. Owing to the narrow defiles in the road, the telegraph party was delayed for troops to pass to the battle then impending, and when it occurred (September 10), the telegraph was only four miles in the rear. Wise had retreated to Lewisburg, leaving the country to Cox, but Wise's command being re-inforced and himself outranked by General Floyd, the Confederates took the offensive, striking a Federal regiment at Cross Lanes near Summerville. Floyd moved southerly to Carnifax Ferry, hoping to beat Cox, who was farther south, but now Rosecrans, with about nine thousand troops, fell upon Floyd's forces, numbering, according to Confederate authority, about three thousand, who gallantly held the Federals at bay until dark, when they effected their escape from Rosecrans' troops on the one side and Cox's on the other. In these movements, Wise, jealous of Floyd, had kept aloof, notwithstanding Floyd's orders. The Confederates now retreated to Meadow Bluffs beyond Big Sewell Mountain, say thirty-five miles, and thus in about three months from the first essay off the line of the railroad, the Union forces had regained nearly all of Western Virginia west of the Alleghany Mountains, and lines were extended from Carnifax to Gauley Bridge and Princeton on the south, and then north-westerly from Gauley Bridge *via* Charleston, West Virginia, to Gallipolis and Hamden, Ohio.

William Patterson, operator, entered the United States Military Telegraph service at Clarksburg in June, 1861, and started south with Fuller's building party, rendering, as he always did, very great aid. He was thus engaged until within six miles of Big Sewell Mountain. Rosecrans soon falling back to Camp Tompkins near Gauley Bridge, this advance line was taken down and Patterson was then located in head-quarters office a while. He next opened an office on the Summerville pike, thirty miles from Gauley Bridge, in a fence corner, where he did valuable service

for two days and nights, when he returned to head-quarters and soon after opened an office at Charleston.

Among the unfortunates in this region "of rocks and rills, woods and templed hills," was M. H. Kerner, who had had one experience with the Disunionists and was booked for another. When hostilities began, Kerner was operator on the Baltimore & Ohio Railroad at Martinsburg, West Virginia. As soon as the Secessionists began organizing troops thereabouts, Colonel Nadenbush, of the Berkely Guards, urged Kerner to join his command, but, being a Unionist, he refused and was in consequence imprisoned. Through the instrumentality of Belle Boyd, who subsequently became notorious as a Confederate spy, and a pretty daughter of Colonel Israel Robinson, Kerner was released on condition that he return to his office and telegraph for the Confederates, but nothing was said as to how long he should so serve and it was not long before, with a friend, he escaped to Sir John's Run, where he crossed the Potomac and walked thence to Hagerstown, Maryland, and then entered service under Gilmore, as we have seen. After telegraphing at Gauley Bridge a few weeks, in May, 1862, Kerner went unattended some thirty miles to the Summerville office, the Gauley operators assuring him very confidentially that he would go North by a longer route, and so it proved.

July 26, about five hundred of Jackson's Confederate cavalry, under Major Bailey, made a dash upon Summerville. Of the few Federal soldiers there, after a little skirmish, about sixty were captured and with them young Kerner and a Doctor Rucker, for whose capture the rebels had offered a thousand dollars reward. Kerner and Rucker were in citizen's dress. A guard was stationed at the entrance of the telegraph office where Kerner was. The wire was cut on both sides, and while the excitement was at its height, Kerner wrapped his instrument in an army blanket and rushed out, passing the guards with the remark that the Yankees had held him prisoner with a girl, Nancy Hart, of whom hereafter. He ran rapidly down the road towards the Gauley, hoping to reach the break in the wire and telegraph the nearest commanding officer the situation at Summerville. But the ruse was discovered, and four mounted men, armed with carbines, persuaded the boy to return with them. To this day,

it is his opinion that they were the most excited quartette he ever saw. Cursing and threatening until the young man thought his last hour had come, they forced him back. Arriving at the office, Lieutenant Colonel Starr and Captain Davis, Doctor Rucker and the captured soldiers were seen in line for marching into Dixie. Major Bailey told Kerner that he had to thank Nancy Hart for his life, as he had determined on shooting him for the "d——d" lies he told to get through the guard with that infernal telegraph machine; adding, "We were too quick for your d——d Yankee trick." Judging from his subsequent treatment, Kerner thought Bailey might have executed his purpose.

Nancy Hart had been guiding guerrilla bands over mountain passes in West Virginia, and informing them of Federal movements. Colonel Starr, after many efforts, finally succeeded, about the 10th of July, in capturing her while sitting in front of a log hut, grinding corn between two big stones. She had with her two beautiful fawns, which she had captured, and which were brought with her to Summerville where she was placed in the county jail, which was in a dilapidated and filthy condition. Nancy herself was none too clean, and her clothing, what was left of it, was very ancient, and too stiff and fragile to bear washing. These things touched Kerner's gallantry, and, on his intercession with Starr, a room was arranged for her in the head-quarters building in which was also the telegraph office. Thanks to Kerner's generosity, for he furnished her with calico, needles, thread and probably Butterick's patterns, she made herself a becoming garment, when, wishing to show her thankfulness, she asked Kerner what present she should make him. An itinerant ambrotypist chanced to be there, so it was agreed, at Kerner's suggestion, that she should give him her picture. He put Colonel Starr's black plume on his Derby hat for her, when she accompanied him, under guard of two soldiers, to the portable gallery, where she sat for the first time before a camera. As soon as she saw it was fairly aimed at her, with great trepidation, she said: "If you are going to kill me, for God's sake, tell me so." Kerner was obliged to sit first, to satisfy her it was not some Yankee infernal machine. Her picture and a lock of

her hair in Kerner's parlor are frequent reminders of his narrow escape from Bailey's deadly purpose.

After a long march, Kerner reached Christiansburg and took cars for Lynchburg, where he found Frank Drummond and his comrades, recently taken near Winchester, all of whom, with Kerner, were soon removed to Belle Isle, and then to Libby Prison, where some one told them they were hostages for a Southern operator captured by the Unionists, and condemned to death. There was no truth in the report, but when the boys' names were called in September, they feared the worst until they found it was the best; that, indeed, all were to be exchanged. On reaching Washington at night, the St. James Hotel people refused them lodgings, as they looked too seedy; but Colonel Stager, regardless of time or pay-rolls, at once furnished sufficient funds. For want of legislation, it is said that none of these captured operators ever received a farthing for the time they were in the hands of the enemy. The first case in which the Government concluded to pay such claims, was that of George M. Brush, who was captured in the West, as we shall see, in the fall of 1863.

Shortly after the battle of Carnifax Ferry, Mr. Fuller, accompanied by a Lieutenant Wheeler, of the regular army, took horse for Clarksburg. The first night out, they lodged in an Irishman's shanty, having full confidence in the family, as the host had helped Fuller's builders. The guests' little room had one small square window. In an ominous hour of the morning, the travelers were aroused by strange noises. "We are betrayed," whispered the lieutenant. They hurriedly dressed, and looking out at the window, it being moonlight, discovered a man moving about the stable where their horses were. The growling dog moved about the premises, but the whisperings within the cabin were even more terrifying, as not a word could be distinguished. It was a lonely hour and a lonesome place; but there was no escape. So, determining to sell their lives as dearly as possible, they commenced their defense against the guerrillas by barricading their door, and standing guard at the window. An hour passed by, and yet the attack had not begun. Evidently the marauders were awaiting the dawn of day, and when it came the man at the barn was seen more clearly; but he was feeding

the horses, and the women, their hands already stained with blood, were dressing chickens. In fact, the household was, as quietly as possible, preparing for the early breakfast, as requested the night before, and the dog had only been baying at the moon. A few miles further on the road, however, they discovered the dead body of a soldier who was shot by one of the mountain pirates.

Besides the operators mentioned, there were, in October, 1861, engaged in this department, the following: J. K. Brown, G. K. Smith, S. G. Lynch, J. B. Pierce, C. H. Johns, M. C. Baldwin, Philip Bruner, S. M. Shurr, C. D. Tull and George W. Printz. The last named operator, it is believed, left Zanesville, (Ohio) office in the summer of 1857, and obtained employment on Mr. Fuller's lines, entering the military service July 19, 1861, and operating the Beverly office from November 8, of that year, to the September following. So far as the author, by careful scrutiny into the conduct of the operators for the Government during the war, has been able to ascertain, and he believes he speaks advisedly, Printz was the only man in the service, who, disregarding his duty to his Government, his oath and his trust, resigned his situation, and, under the inspiration of what George Stephenson has called "the mightiest power under heaven," secretly passed the Federal lines to the Confederates. It is not known, however, that he ever advised the enemies of the Union of any information obtained from the Union wires. If an exception be necessary to establish the rule of fidelity among the operators, perhaps a more harmless example could not be wished than is found in this fellow, who has since had occasion to seek a livelihood in other employments.

CHAPTER V.

THE SOUTHWEST EARLY IN THE WAR.

June 18, 1861, General McClellan received orders extending his command so as to include Missouri, then under General Lyon. This gave him Missouri, Illinois, Indiana, Ohio and Western Virginia.. Virginia and Missouri, like Kentucky and Tennessee, divided in opinion, were threatened with internecine strife, while the three great States of Ohio, Indiana and Illinois were vigorously preparing to strengthen McClellan, that he might successfully grapple with giant revolt. McClellan, as shown, was about to enter upon an active campaign in the field, personally maneuvering a large army against the enemy, near Beverly, W. Va. Constant communication by telegraph with the commanders in Missouri, alone enabled him to attend to the military requirements of that State. It kept his several armies in full view, and provided lightning couriers to transmit his orders. Truly, "what hath God wrought," through Morse, that by the instrumentality of his invention St. Louis should be nearer Grafton than, in 1776, New York was to Philadelphia.

We have seen who were the trusted telegraphers in West Virginia. Now let us look westward, and, in the course of events, note who at the Missouri end enjoyed the inspiring confidence of the military officials; for let it always be borne in mind, that few men ever had greater opportunities to betray a cause than the telegraph operators, whether in the Federal or Confederate service.

At the breaking out of hostilities, the great State of Missouri, having a population equal to that of Virginia or Kentucky, and a territory about two hundred and eighty miles long, measured on a north and south line through its capital, and over two hundred and fifty miles wide, reckoning by a line due west from St. Louis, was in a sea of trouble. Its means of communication, excellent for the period, were quite meager compared with

its present. The Mississippi River on the east separates it from Illinois as far south as Cairo, and from Kentucky thence to Island Number Ten; even Tennessee for a number of miles abuts the great State. On the south, it is bounded by Arkansas; on the west, mainly by Kansas, and on the north by Iowa. The railroads radiating from St. Louis, had their termini on the south at Ironton; south-west, at Rolla; west through Jefferson City, the capital, at Sedalia, and north-west at Macon City, where a junction was effected with the Hannibal & St. Joseph Railroad, that ran west across the State from opposite Quincy, Illinois. Besides these, the Missouri River, entering Missouri at Kansas City, crosses the State, and passing Lexington, Booneville, Jefferson City and St. Charles, enters the Mississippi a little below Alton, Illinois. These facilities were increased by wagon-roads, for the most part incomplete or poorly made, and by smaller rivers of little service. Telegraphic communication was had by the Stebbins line connecting St. Louis with Fort Scott, Kansas, by way of Springfield, Missouri. There was also a line over the Hannibal & St. Joseph Railroad; another line connected St. Louis with Sedalia *via* Jefferson City and Syracuse, thence it ran south-westerly to Fort Smith, Arkansas, *via* Warsaw, Bolivar and Springfield. Such were the means of communication in Missouri early in 1861.

When the bombardment in Charleston harbor was echoed by telegraph across the prairies of Illinois, the Government arsenal at St. Louis, in charge of Captain Nathaniel Lyon, contained twenty-two thousand stand of arms. General Frost, a Missouri State Militia officer, began organizing a strong force at a camp just outside of the city, nominally to secure State neutrality, but really to capture the arms in the arsenal, arm his troops and then, capturing the city, containing, in 1860, one hundred and sixty thousand, seven hundred and seventy-three citizens, make a bold stand in favor of the Confederacy. So imminent was the danger of such capture, that Captain Lyon, to deceive the Secessionists as to his strength, sent away by night portions of his handful of troops, to return by day with drums beating. Governor Jackson had, before this, telegraphed the President a refusal to furnish troops, and there was no authority in the State for the enrollment of a Federal soldier. At this critical time,

LIBRARY OF THE UNIVERSITY

the rioters in Baltimore cut the telegraphs to Washington, whence only could emanate orders to meet the emergency. The Governors of Illinois, Indiana and Ohio, clamorous for arms, appealed by telegraph to General Wool in New York. Wool telegraphed Governor Yates to send a judicious officer with four or five companies to the arsenal, which was believed to be in danger of seizure. In consequence of that telegraphic order, this large quantity of arms, together with two field pieces and one hundred and ten thousand rounds of ammunition, was removed to Illinois during the night of April 25, and instead of being used to destroy, was perhaps the means of saving the Union, as at that time most of the Government arms were in the Southern States.

The President, April 30, by telegraph, authorized the enlistment of troops in Missouri, whereupon German and American regiments were enrolled, and on the 10th of May Captain Lyon, with the aid of these troops, captured Frost's command of twelve hundred men, twenty cannon and many hundred rifles and muskets with ammunition. These decisive proceedings quickly culminated there in positive war; the Secessionists generally throwing aside all masks and openly avowing their opinions, met in camps to defend them. June 12, Governor Jackson called for fifty thousand troops to be used against the Federals. That day the telegraph wires between the State capital and St. Louis were cut. Jackson selected Lexington and Booneville for his militia to concentrate. To disperse these State troops, Lyon's command arrived at Booneville on the seventeenth, and utterly routed the militia under Marmaduke, pursuing them south-westerly to Vernon County near the Kansas line, where Price with his Lexington forces joined the retreating Confederates, and together they pressed further south into Jasper County, where they were confronted by another Union force under Colonel Sigel, which was intended to co-operate with Lyon, now a brigadier general and commander of the Department of Missouri. Sigel's forces fell back, fighting at Carthage, and joined Lyon at Springfield on the 10th of July. The telegraph company operating the lines to Booneville was able, on Lyon's advance, to repair their wires, so that by the 21st of June he dispatched telegrams from Jefferson City, and on the twenty-fourth from Booneville, where he

remained in telegraphic communication for some days at the head of one invading army, while his chief, on the eve of another campaign, was at Grafton, over seven hundred miles distant, at the head of another. When Lyon left Booneville, July 3, he seems not to have been again in telegraphic communication with any point up to the date of his unfortunate sacrifice in August.

Charles Lehr was the operator at Springfield when hostilities commenced. At that time, Unionists and Secessionists bushwhacked one another in that section, and Lehr was fired at twice while mending the line. On his return to his office, he discovered the wire had been cut again, and employing an assistant, started out once more and found that half a mile of line had been carried off. While repairing this, he was again fired upon by concealed enemies, but being well armed, he and his assistant entered the brush and fired a few shots where they had seen the smoke rise, after which they were not molested. It is safe to add that they did not tarry long to make perfect joints. Again returning, to find the line cut once more, Lehr, believing his usefulness there as an operator ended, joined a company of home guards to hunt horse thieves and bushwhackers. This company participated in the battle of Carthage. Stebbins' lines being now destroyed, Lehr was next stationed as operator in Missouri opposite Quincy, where we shall meet him again.

In the Spring of 1861, and prior thereto, J. J. S. Wilson, residing in Springfield, Illinois, was superintendent of the Illinois & Mississippi Telegraph Company, The Chicago & Mississippi Telegraph Company and the Illinois Central Telegraph Company, owning the telegraph (patent) territory of Illinois, Iowa, Minnesota, North Missouri from St. Louis and a portion of Wisconsin. Charles Davenport was division superintendent for the St. Louis district of the Western Union Telegraph Company and C. M. Stebbins, of the Missouri & Western. The lines of these companies entered the consolidated office in St. Louis, managed by George H. Smith, who was also superintendent of the St. Louis, Alton & Terre Haute Railroad wires.

On the 25th of July, General John C. Fremont reached St. Louis and assumed command of what was then known as the

Department of the West, which embraced Illinois and all the States and Territories west of the Mississippi River, including New Mexico, with an expectancy of Kentucky also. By direction of General Fremont, George H. Smith, early in August, erected lines in the city, to connect the main office with the head offices of the army, including Fremont's head-quarters, Major McKinstry's (chief quarter-master) office and the arsenal. At this time there was no telegraphic communication between St. Louis and Ironton, or along the line of the Iron Mountain Railroad; none from St. Louis on the North Missouri Railroad to the Hannibal & St. Joseph Railroad; none over the South-west Branch of the Pacific Railroad to Rolla, and none west of Jefferson City on the main stem of the Pacific road; but on the Hannibal & St. Joseph road the line and road itself had been kept open, except when temporarily impaired by guerrillas.

Operator D. A. Williams, who opened an office for Colonel U. S. Grant, at Salt River, and subsequently exhibited great courage in repairing the line, was exceedingly useful hereabouts at this time. John B. Clarke was operator and agent at Callao, on this road, during the winter and spring of 1861. Sometime in May, a party of local Secessionists demanded of Clarke the truth concerning a report they had received by special messenger from Macon City, which lies about eight miles east of Callao, that the Dutch had taken Macon City, killed the women and children there, and were then marching on Callao. This report was but the result of that dark reportorial wave which, gathering blackness as it advanced from St. Louis after the capture of Frost's militia, had spread like a great cloud, and hung over the State of Missouri. Clarke's denial was unsatisfactory. The Hannibal & St. Joseph was regarded as a Yankee road, and its employees were all suspected by the secession element. Three mounted men were sent toward Macon City to ascertain the facts, and Clarke was held in custody until their return, when, if the report proved true, he was to be executed.

Burning bridges, firing upon passenger trains and cutting the telegraph was henceforth for many months the occupation, in part, of marauding bands throughout North Missouri, and, consequently, Clarke became a traveling operator. Taking his instrument he accompanied troops on the trains over the road, to

move other trains in case a bridge was burned and communication with the dispatcher cut off. It was while so engaged at Platte River, that T. O'Meara, operator at St. Joseph, saved him from capture by telegraphing notice of the approach of Confederates, who fired the new trestles.

In the early part of August, General John Pope, in Alton, Ill., assisted by General Hurlburt, at Quincy, was in command of North Missouri, including the counties (on both sides) along the Missouri River, except St. Louis. The outlying department posts, to the west and south, were at Booneville, 187 miles from St. Louis: at Jefferson City, 125 miles; at Springfield, 236 miles (General Lyon's command); at Rolla, 115 miles; at Ironton, 80 miles; at Cairo about 186 miles, *via* railroad, and at points contiguous to each. The principal contending forces were, in front of Lyon, about twenty thousand to his eight thousand; about five thousand under Thompson, threatening Cape Girardeau, which is on one of the few Mississippi highlands in this department, and lies sixty miles above Cairo. A little below New Madrid, was a force estimated at twenty thousand, under Pillow, and further north another under Hardee, about equal to Thompson's.

In this situation of affairs, the commanders at Cape Girardeau and Cairo, and Lyon at Springfield, were repeatedly calling for re-inforcements. Fremont was telegraphed, while in New York, on the 18th of July, to re-inforce Lyon, and, on the 2d of August, J. C. Kelton, Assistant Adjutant General, telegraphed from Cairo: "General Lyon wants soldiers, soldiers, soldiers! So says General Hammer, who has just arrived from Springfield." Girardeau and Cairo were strengthened, the latter by several regiments, although fortified and having heavy artillery in position. It has been said that, owing to its position and armament, the rebels had not, on river and ocean, such craft as could have approached Girardeau. But not a soldier reached nearer Lyon's force than Rolla, until the remnant of his heroic army was in full retreat after one of the most gallant battles of the century. On the 10th of August, at Wilson's Creek, near Springfield, Lyon fell at the head of his troops, which were defeated with a loss of 223 killed, 721 wounded, and 292 missing. That of the enemy was about the same.

About the 1st of August, George H. Smith was appointed

by Fremont, manager of all the Government telegraphs in the department, whereupon he submitted his plan for a permanent organization, as follows:

"My proposition is to organize a corps of telegraph operators, builders and repairers, of experience, for the purpose of putting in complete order all telegraphs in this department, now suspended, and building any lines, or putting in telegraphic communication any point ordered by the Commanding General; this corps to be regularly organized, under military discipline, armed and equipped; to receive competent pay for their respective services. I also propose, with the authority of the Commanding General, to purchase to the best possible advantage a sufficient quantity of telegraphic material, including wire, telegraphic cordage, insulators and teams, for service for building and repairing for immediate use in any emergency, so that time and expense may be saved. Each operator to be furnished with a pocket instrument to open communication from the field of battle, or the marching army, to head-quarters, or elsewhere, instantly. I propose that the corps shall number fifty, more or less, as may be deemed necessary, with authority to increase the number as circumstances may require, and to be proportionately divided — operators, builders, repairers and teamsters, as the work to be done may demand, with a view to the least possible expense and the most efficient action."

This was substantially approved, and efforts were made to recruit a battalion of three companies, which Smith, with the rank of Major, was to command. These companies were to be armed and drilled. Frank S. VanValkenburgh, who had participated in the battle of Rich Mountain, as sergeant in an Indiana three-months regiment, on telegraphic request, hastened to St. Louis to accept a third (special) lieutenancy in the battalion. Company B, by September 9, was recruited for three years to the number of seventy-four privates, eight corporals, two lieutenants, one captain (W. S. Hewett). Companies A and C were partially recruited. T. Milton Guerin, Theron R. Perlee, George Allen, C. D. Waterhouse and Duncan T. Bacon were to be officers in the battalion. Guerin was so remarkably gifted as to enable him to obtain whatever was needed, even after Major Smith had found it hopeless. Perhaps his "Index to General

Orders Affecting the Volunteer Forces," printed in 1861, gave him some prestige, as it was a work of some considerable labor and merit. Among the officers, but few were practical telegraphers, and in the ranks there were none. This battalion rebuilt the telegraph line to Ironton, Rolla and Sedalia, from Jefferson City to a point twenty-five miles south of Syracuse ; from St. Louis arsenal to Benton barracks, six miles, and laid a cable across the river, connecting Palmyra and Quincy. All this was before November, 1861.

There being no legal authority for the organization of the battalion, it was disbanded by order of the Secretary of War, about November 1. No commissions were ever issued, but the title of major was permanently attached to Mr. Smith. Except Chester's Telegraph Corps (a company in General Sickle's brigade), in which Frank H. Lamb and C. I. Brown were the only operators, I know of no other instance of military company organization for telegraph service during the war, and this latter, although so enlisted, being sworn into service for three years, was held to ordinary soldier's duty, but Brown and Lamb were detailed therefrom for telegraph service.

Let us now take a later view of the military aspect in Missouri. Fremont was making preparations to move an army to Springfield when he ascertained that Price, coming northward from Clinton, had reached the Upper Osage, and was moving in the direction of Warrensburg, threatening Lexington, Jefferson City and Booneville. When within, say, thirty-five miles of Lexington, Price, after halting about ten days, moved against it, arriving in its vicinity on the 11th of September, with a force of about twenty thousand men and thirteen guns. He soon drove Mulligan's force of 2,780 troops and eight guns from the town. They took a strong, elevated position just outside, where, with bravery unsurpassed and in anticipation of aid from some of Fremont's fifty thousand, they withstood the enemy for nine days. After the nine days' defense, commended alike by friend and foe, Mulligan being out of ammunition and water, was, on the 21st of September, obliged to capitulate.

On the twenty-seventh, Fremont started in pursuit of Price. At his camp (Lily), two miles from Jefferson City, he was telegraphically connected with the outside world—a part of Smith's

battalion having laid a land cable from a reel mounted on two wheels, drawn by one horse. Thus in two hours from the time Major Smith received his orders, communication with St. Louis was complete. This office could at any moment place him in immediate communication with the other principal outlying posts. The cable was buried in a trench to preserve it from injury. Land cables were not used again in Missouri during the war. Price fled to the south-west corner of the State, where, notwithstanding he was joined by McCulloch's force of five thousand, he continued his retreat to Pineville. Fremont encamped at Tipton, finally reaching Springfield about the 1st of November. He was superseded by General Hunter at a time when he and his army expected to join battle with their adversaries, then much inferior to the Federals in strength. The gallant charge by Zagonyi, the recent victory at Fredericktown over Thompson's forces, and the high regard of the troops for their late commander, made victory a moral certainty.

Hunter was ordered to retire from Springfield. Charles L. Weir, chief cipher operator at that time in St. Louis, was the bearer of that most unfortunate and injurious command. Historians have speculated a good deal about this order. The facts are that Weir received dispatches in cipher from General McClellan, directing Hunter to retreat to Rolla; and so urgent were they regarded, that McClellan, who knew Weir while in Cincinnati, telegraphed him a personal request to take the telegrams to Hunter by way of Tipton. There was a beautiful young lady on the banks of the Ohio, probably in Hamilton County, Ohio, whose nuptials were soon expected. Weir was a highly important factor in the programme, and wanted some one else sent to Hunter; but McClellan prevailed, and Weir started for Tipton, where he procured a horse of Philip Sheridan, then captain and assistant quarter-master there. Equestrianism was never Weir's hobby, and Sheridan may have, for the fun of the thing, selected an animal that traveled as ungracefully as a camel. Be that as it may, Springfield, *via* Warsaw and Bolivar, was a hard road to travel, especially when the traveler was pressed for time and unused to a Mexican saddle. How Weir succeeded, we scarcely know; but this we know full well, that what was left of him late at night on entering Springfield, delivered the dispatches and went

to bed, feeling that it had passed through many battles, and was seriously wounded scores of times all over. Collecting himself the next day, and readjusting his "shattered columns," he and Charles G. Halpin (Miles O'Reilly) returned to the railroad at Tipton, *in an ambulance.*

During these military operations, the Telegraph Corps in Missouri was increasing in efficiency, and telegraphers were stationed as hereinafter shown, not including company employés: At West Quincy, Charles Lehr: while temporarily working nights at a junction near Palmyra, he was surrounded by rebel horsemen, some of whom presented revolvers at his head and threatened him with their contents unless he obeyed their behests. They searched his office for telegrams and decamped. At St. Louis, H. A. Bogardus, Derrick O'Dyer from August 9th, C. S. Payne from September; at Arsenal, A. S. Hawkins from October 4th, Duncan T. Bacon a short time in August; at Fremont's head-quarters, John C. (Yankee) Sullivan and D. T. Bacon; at Jefferson Barracks, J. L. Quate from August 25th; at California, H. J. Fish and R. Kuhn; at Tipton, Wayne H. Parsons and S. L. Griffin; at Smithton, Alex. Hunter; at Sedalia, H. A. Bogardus in October; at Moselle, George C. York; at Sullivan, Luke O'Reilly; at Rolla, C. S. Payne, temporarily, J. H. Rugg and W. H. Woodring; at Mineral Point, James H. Douglass; at Pilot Knob, J. H. Byrne: Frank S. Vanvalkenburg acted generally as assistant to Major Smith, wherever most needed. Sullivan and Bacon remained with Fremont until he was superseded at Springfield by Hunter. Payne also accompanied Fremont, but went to Rolla afterwards. Isaac McMichael accompanied the army to Warsaw, where he opened office. Woodring, who enlisted May 3, 1861, for three years, had already done good service as operator when he was detailed to work the Rolla office.

Thus far we have generally overlooked affairs about Cairo. There was some friction, arising out of Fremont's military order, placing Smith in charge of the telegraph in the department, which resulted in J. J. S. Wilson being recognized as superintendent east of the Mississippi River, and Smith, west. Owing to embarrassments common to civilians having important military functions to perform, and appreciating the great duties

devolving upon Wilson, Governor Richard Yates, of Illinois, September 10, 1861, commissioned him colonel of Illinois volunteers.

John James Speed Wilson was so named because of the favor in which his parents held John J. Speed, Jr., a relative of theirs. Speed not only furnished his whole name, but provided a creditable employment whereby his namesake might maintain it becomingly. Wilson was born, March 1, 1834, in Danby, New York, where his father dealt in lumber. Subsequently (1845), the family removed to Racine, where young Wilson's ideas fairly began to develop, aided of course by the teachings provided in the public schools. Having natural inclinations toward mechanics, it is quite probable that his future would have lain in that direction but for the coming of Speed upon the scenes just as Wilson had reached that restless age of fourteen, when a boy is most anxious to undertake his own fortunes. Speed had contracted with Hon. F. O. J. Smith and Amos Kendall to erect for them, or rather for their telegraph company, the Erie & Michigan, a telegraph line from Detroit to Milwaukee. At the same time (1847), other contractors were connecting Detroit with Buffalo, and it was the prosecution of his undertaking that brought Speed to Racine, when Master Wilson, convinced that telegraphy was his affinity, embraced it with all the ardor of a young lover. It was but a short time after when Speed, Jr., who was chosen president of the company, made Wilson manager of Little Fort

J. J. S. WILSON.

(now Waukegan), Illinois, office, at a salary of about fourteen dollars per month.

Those were halcyon days for operators, in all matters except salaries; the art was mystic; new offices were being rapidly opened in all the States, and attention to duty was certain of ultimate reward. Two years after, Wilson, at the age of sixteen, was appointed superintendent of the Hotchkiss lines, connecting Madison, Wisconsin, with Chicago, and, consequently, he removed to the latter city. The author does not remember another instance of like trust in one so young, and it argues either that the duties were not then particularly executive, or that Wilson's precocity in that direction was remarkable. The latter would seem to be the case, since he was obliged to resign the position the following year on account of the responsibilities wearing on his nervous organization. While seeking relaxation, he was induced to take temporary charge of the Springfield, Illinois, (Illinois & Mississippi Telegraph Company) office, and in five months thereafter was made superintendent of the lines in the western division. That was in 1851. During the ten years following, Mr. Wilson, retaining his position, was stationed at the following points in the division, viz.: Springfield, Illinois, Burlington, Iowa, Galena, Illinois, St. Louis, Missouri, and Quincy, Illinois, which indicate the considerable field embraced within his territory. His position threw him in contact with most of the historic men of those times, as well as with others since renowned. Among these may be named Lincoln and Grant. It is worthy of mention that many notable telegraphers are graduates of this division of the Illinois & Mississippi Company's lines, among whom are Robert C. Clowry, James Gamble, Charles C. Hine, E. D. L. Sweet and, it also brought to the front in telegraphic circles, that distinguished jurist and citizen, John D. Caton, of Illinois.

Samuel H. Beckwith, having joined Colonel W. H. L. Wallace's regiment, which was stationed at Villa Ridge on the Illinois Central Railroad, twelve miles north of Cairo, sometimes assisted Ed. Schermerhorn, a private in the same regiment, in telegraphing at this field office, which was in connection with the

main Chicago line, as early as May 19, and so remained for a month, when the regiment moved to Bird's Point.

General Polk, having entered Kentucky on September 5th, near Columbus, occupied that place on the seventh and fortified it. The Federal forces at Cairo, under General Grant, no longer respecting Kentucky's position as an armed neutral, seized Paducah, about fifty miles above Cairo on the Ohio, on the 6th of September, and also a point opposite Bird's Point, a little below Cairo, which was fortified and named Fort Holt. Up to November 7, when the battle of Belmont was fought and General Grant lost about four hundred men, no conflict of special moment occurred in the neighborhood of Cairo. Colonel Wilson built a line along the north bank of the Ohio from Cairo, crossing the river by cable to Paducah. Communication was opened with Fort Holt *via* the old cable across the Ohio and line extended to the fort, the telegraph being used to notify Cairo of any Confederate approach by water. The operators employed in this district, up to November 1, were William Foley, at Cairo; A. W. O'Neil, probably there also; H. W. Nichols, at Metropolis; George S. Pidgeon, at Caledonia; Samuel T. Brush, at Mound City; J. T. Tiffany, at Fort Holt; L. D. Parker, at Paducah; all of whom were first employed in October.

On the Confederate side, fronting the military points of the Federal Department of the West, telegraph connections and advantages, except in Kentucky, where they were reasonably good, bore a far different aspect. The Confederates' advance office, after the capture of Paducah, was at Blandville, eighteen miles from Columbus and twelve from Cairo. All of the private lines in the Confederacy being intact, the chief cities and towns of the South enjoyed, to a degree nearly equal to those in the Northern States, the advantages of early information as to the progress of military events in this quarter.

The Caton lines and South-western Company's converged at Cairo, which, before the war, furnished a Southern outlet for Chicago, St. Louis and eastern business, but soon after troops began arriving at Cairo, the South-western lines were cut at Columbus.

At this time, Emmet Howard was operator at Blandville and

required by his company to keep the line in order to Cairo, Paducah and Columbus. But the Federal cavalry and Confederate scouting parties soon overran this region, occasioning frequent skirmishes, the reports of which were forwarded by courier to Howard, who then telegraphed them to Columbus. It is a singular fact, that Blandville and Cairo were still in communication, the operators frequently conversing, but jealously eschewing military affairs. They became more reticent as the war fever raged, and finally the southern line was cut off at Cairo. Howard now became anxious for his safety, but by a delicate adjustment of his instrument, owing to some defect in Cairo office, he found he could hear Chicago and other offices. He became deeply interested, hoping to hear important messages, and for several days listened attentively to telegrams, but only heard railroad and commercial dispatches.

That line to Blandville was soon after destroyed, but the Paducah wire was in circuit until the 6th of September, when Howard reported at Columbus and was ordered back. He connected his instrument in a ravine, one mile south of Blandville, a hundred yards from the main road, where, behind a fallen tree, with a fine wire run to the main line, so as to prevent discovery, he telegraphed to Columbus such reports as were furnished him by mounted scouts, and also such movements of Federals along the main road as he noticed. But finding little glory and much risk and hardship, he sought more congenial quarters, disgusted with field telegraphy, especially as the Confederates seemed not to have made the most of the information so obtained.

In Arkansas, prior to the year 1860, there was no telegraph, but before the war, as we have seen, C. M. Stebbins connected Fort Smith through Van Buren, Fayetteville, and along Pea Ridge in North-west Arkansas, with Springfield and Syracuse, Missouri, and about the same time Henry A. Montgomery built a line from Memphis, Tennessee, along the projected Memphis & Little Rock Railroad to Little Rock, the State capital, whence it was extended at least to Clarksville by Montgomery during the war. He also, before the war, built a line from Madison, St. Francis County, Arkansas, to Helena, Arkansas. These were completed about January, 1861. L. C. Baker, the first

manager at Little Rock, became superintendent of the line after the capture of Memphis. During the winter of 1860–61, Messrs. Snow and Ketchum built a line from Little Rock to Pine Bluff, south-east of Little Rock, on the Arkansas River, which soon came under Baker's management.

Among the people, the secession question absorbed all others and was involved in an election of delegates to the State convention, to be holden March 4. Robert S. Gantt, a candidate to that convention, an ex-telegrapher and a Secessionist, had been defeated in Prairie County by Colonel Totten, a conditional Unionist, who, like all others of that frigid kind, became a torrid Secessionist, as did also some other delegates. Gantt had employed Baker in Mississippi in 1855, and may have had something to do with the decided effort made late in February to prevent Unionists from sending political telegrams, but although Baker was a Secessionist, he had the manhood to reject proposals to that end; whereupon the plotters intended forcibly to possess themselves of the office and install Gantt, but in this Gantt would not aid them. About the 1st of March, W. B. Windsor, an ex-operator, acting as clerk on a steamer plying between Cincinnati, and Fort Smith on the Arkansas River, was induced by Montgomery and Baker to relieve the latter, who was beset by Unionists and Secessionists, charging him with divulging the contents of messages. Although the complaint was unfounded, his position was one of peril. After a short time, Baker returned, and Windsor took the Des Arc office. Federal Major Sturgis having abandoned Fort Smith, the Confederates took down some of Stebbins' line in North-west Arkansas and constructed others therewith. Clarksville was the western terminus of telegraphic communication, when Price and Van Dorn retreated in March, 1862, after the battle of Pea Ridge, not yet noticed.

There yet remains one other line of contact between the border slave and free States to consider. In those early days, only brave men openly espoused and actively participated in the movement in Kentucky, for or against disunion. But Kentucky, with its population of near a million whites, was not lacking in men of that type. On three sides of the State lay other slave

THEATRE IN CENTRAL KENTUCKY AND MIDDLE AND EASTERN TENNESSEE, ALSO IN MISSOURI AND ARKANSAS.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA.

States, and on the north, across the Ohio River, are the great free States of Ohio, Indiana and Illinois, and their liberty-loving people. Kentucky long wrestled with that volcanic sentiment which had engulfed about one-third of her people, and stood, as it were, for anxious months, anticipating an eruption, if not at Louisville then in the Blue Grass region, Frankfort, Lexington or Camp Dick Robinson, where the crater was likely to appear, and where it would have developed but for a handful of as determined men as ever viewed liberty at the portals of slavery.

The means of communication throughout the State were ordinarily good for accustomed purposes and consisted of wagon roads, rivers and railways. Its principal internal rivers are the Tennessee, Cumberland, Green, Salt, Kentucky and Licking. Its railroads ran from Louisville to Nashville, Tennessee; Bowling Green to Memphis, Tennessee; Louisville to Frankfort and Lexington; Covington to Lexington and Nicholasville; also two short roads south from Paducah and Henderson. Along most of these ran lines of telegraph. Owing to the position of Kentucky as a neutral, nominally an armed neutral, the Federals and Confederates abstained from entering it until Polk, deeming the occupation of Columbus and vicinity a military necessity, occupied those points, and Zollicoffer, about the same time, as if acting in concert, entered the State through East Tennessee. About this time (September 5), General L. H. Rousseau, a Kentucky Unionist, was quartered in Camp Joe Holt, opposite Louisville, recruiting Kentuckians.

The Legislature of Kentucky having, on the 12th of September, invited General Anderson, of Fort Sumter fame, commanding the Department of the Cumberland, to enter Kentucky in force, the State was thereby officially committed to the Union, and General Anderson soon after removed his head-quarters from Cincinnati to Louisville.

At this time Confederate General Buckner was in command at Camp Boone, near the Louisville & Nashville Railroad, in Tennessee, from which he moved September 17, by the railroad, to capture Louisville. The two telegraph wires along the railway between Louisville and Nashville had been in working order up to this time, and constituted the last southern connection to be severed. Buckner planned a surprise. Had he first

directed squads of troopers, each accompanied by an operator, to capture and control some of the northern telegraph offices, and moved more cautiously by rail, instead of cutting the wires between Bowling Green and Louisville as he did, and having his forward engine dumped in the ditch as it was, by reason of a rail being displaced by loyal young Crutcher, there can be no doubt but that he could have taken the city. Soon after four o'clock P. M., when the lines were cut, rumors of his coming having been some days afloat in Louisville, it became noised about the city that the lines were severed.

All felt certain that it betokened the coming of Buckner's troops, and thereupon the employés of the Louisville & Nashville Railroad Company in the city began tearing down the poles and wires in the vicinity of the depot, under the impression that they were helping the Union cause. T. R. Boyle was manager of the Louisville office, and E. C. Boyle, assistant. Both were entrusted with the Government cipher. About six o'clock Captain Green and Major Murray, of Anderson's staff, entered the telegraph office to prohibit telegraphing south. E. C. Boyle explained why that was impossible, and, having convinced Anderson of his loyalty and that of his brother, the manager, further destruction in the city was stopped, the Boyles reinstated, and the city wires rebuilt. Operator John Lenhart consented to accompany the Union troops now gathering at the depot, to the number of about three thousand, to meet Buckner out on the line of the road, and they went under Generals Sherman, Rousseau and Johnston that night to the Rolling Fork of Salt River, where a bridge had been burned by order of Buckner, whose plans had miscarried by reason of his mishaps. He withdrew and entrenched at Bowling Green, and the Union forces halted at Muldraugh's Hill, three miles north of Elizabethtown. The telegraph was intact north of the Federal position and south of Buckner's.

During Anderson's command, there was no telegraph at head-quarters in Louisville. General W. T. Sherman succeeded General Anderson October 7, and spent a great deal of his time in the telegraph office, frequently remaining as late as midnight; but about the 1st of November a line was built to his office. Sherman was himself relieved, about the middle of

November, by General D. C. Buell, whose command included Ohio, Michigan, Indiana, and Kentucky, east of the Cumberland River, and Tennessee.

In casting about for a man of sterling character, unswerving loyalty, executive ability and an intimate knowledge of telegraph routes and men, to manage the military telegraph in Kentucky, Captain Stager, who had recently been charged with the management of all military telegraphs, happily decided to appoint Samuel Bruch to the position of Assistant Manager. This was done in anticipation of active work, and before there were any military lines in Kentucky; hence, Bruch's duties for a time were principally censorial. In October, by direction of General Sherman, Bruch built the first military telegraph line in Kentucky. It connected Lexington with Nicholasville, and was fifteen miles long. Camp Dick Robinson lay about ten miles south of Nicholasville.

On July 2d, Lieutenant (afterward General) William Nelson established this camp as a rendezvous for recruits. General George H. Thomas relieved him August 15, and there organized the first brigade and nucleus of what afterward developed into the renowned Army of the Cumberland. Here General Thomas prepared to confront Zollicoffer, who was south of Barboursville.

There were established in Kentucky up to November 15, six military telegraph offices, conducted by ten operators, some of whom were stationed as follows: head-quarters, Louisville, H. B. Spencer; city office, E. C. Boyle; Nicholasville, F. C. Cook; New Haven, D. C. Sellers (November 19); Lebanon Junction, C. H. Griffith.

From April 25 to November 15, 1861, there were built for military telegraph purposes in the several departments, one thousand, one hundred and thirty-seven miles of line, on which were one hundred and six offices, worked by one hundred and sixty-three operators; eight hundred and fifty-seven miles of this line, fifty-six offices and eighty operators, were outside of the Department of the Potomac, and it was well said by Mr. Stager in his report of November 14, that "in many instances the wires followed the march of the army at the rate of eight to twelve miles per day, there being no other lines of communica-

tion upon the routes where these lines have been placed. The capacity of the telegraph for military service has been tested, and in affording rapid communication between the War Department, the Commander-in-Chief and the different divisions of the army; in directing the movements of troops and the transportation of supplies, it may be safely asserted, that it is an indispensable auxiliary in military operations. The organization of the government Telegraph Department, under the direction of the Secretary of War, will add greatly to the efficiency of this branch of the service."

CHAPTER VI.

THE CORPS ORGANIZED.—BIOGRAPHICAL MENTION.—A VIEW OF THE TELEGRAPHS SOUTH.—THE FORT MONROE LINE.—THE MONITOR AND MERRIMAC.—THE PENINSULAR CAMPAIGN.—A VIEW ALONG THE COAST.—BANKS' DEFEAT IN THE VALLEY.—EXPERIENCE OF CAPTURED OPERATORS—AFFAIRS IN WEST VIRGINIA.

McClellan, upon Scott's retirement in the fall, became, under the President, commander of all the armies. A new feature in their conduct seems to have resulted, viz., that thereafter the armies should operate in concert along the whole line, from Fortress Monroe to New Mexico, and in that way make it reasonably certain that one or more of the important gateways to the South would be thrown open to the Federals. But over a territory so vast, presenting so many points of defense, and defended by armies so numerous and brave, concert of action, vital as it was to the Unionists, was clearly impossible without an electric tongue to convey intelligence and speak commands.

The telegraph had accomplished much—had given evident satisfaction, but like the armies, it had too many heads. In St. Louis, Mr. Stager had a small voice, and General Fremont a trumpet; consequently certain lines in Missouri, built by contract, cost one hundred dollars per mile along railroads, while in West Virginia, far from railroads and in a mountainous country, they cost but forty-five dollars. It was also discovered that the Government telegraph agents, in their necessities, were competing with one another in the purchase of material. Thus the Government bid against itself.

While Secretary Cameron was considering these things, Amasa Stone, an influential citizen of Cleveland, Ohio, in a conversation with him, suggested Mr. Stager as the best man to undertake the general management of the military telegraph. October 16, Assistant Secretary Scott telegraphed Stager to come

to Washington and submit his views, which he did, October 26, as follows:

"I submit herewith, for your consideration, a plan for organizing the Telegraph Department for Government service, to be under the direction of the Secretary of War. The appointment of a General Manager, whose duties shall be, under the advice and approval of the Secretary of War, to purchase, transport and distribute all material required in constructing, maintaining and operating Government telegraph lines; said Manager to appoint an assistant for each military district or department, and to select all operators, repairers, builders and others, engaged in Government telegraph service. The material distributed and expense incurred, to be charged to the respective military districts where used; the Manager to make quarterly returns to the Secretary of War, of property on hand and in use. The issue of an order to all quarter-masters and assistant quarter-masters to fill the requisitions promptly, of the General Manager and of his assistants, on a proper certificate for the same, for transportation, subsistence, equipments, forage, etc., when needed for the prompt prosecution of work directed by the commanding officer of the district; also, to pay all bills for labor, transportation and material, when certified by the General Manager of the Telegraph Department. All accounts connected with this department, to be certified to by the General Manager. The General Manager, with the approval of the Secretary of War, to fix the grades of service and pay, from time to time, as exigencies and public interest may require. * * The General Manager to arrange with the different telegraph companies, for special or extraordinary use of lines and offices, on terms to be approved by the Secretary of War." (To which Scott here added: "In case of emergency the General Manager shall take possession of any of the telegraph lines that may be required for public service.") "Whenever persons engaged in Government telegraph service, or detailed for work where ordinary subsistence can not be obtained, rations will be furnished by the commissary most convenient, and the cost of the same to the Government shall be deducted from the regular pay of the persons receiving rations. I recommend the following grades and pay for the persons employed in this department, subject of course to modification by the Secretary of War, from time to time, as the public service may demand. The amounts here given, to include service and subsistence:

	Min.	Max.
General Manager		
Assistant Manager	$100	$175
Chief Operator	60	70
Assistant Operators	40	60
Foreman of Construction	50	70
Repairers	45	55
Wire Men	40	45
Laborers	30	40
Messengers	15	20

* * * The Quarter-master General to make such arrangements for payment as will meet the wants of the service."

This paper was endorsed as follows:

War Department, Oct. 28, 1861.

Respectfully Referred to the President:

The Secretary of War believes it to be a necessity, but wishes your views. Mr. Stager, the gentleman who will deliver this, is now in charge of Government lines in the West, having been placed there by General McClellan, and well calculated to perform the duties. His connection with all leading lines will be of service. If you approve, arrangements will be made at once.

Very truly, Thos. A. Scott,
Asst. Sec.

Executive Mansion, Oct. 28, 1861.

I have not sufficient time to study and mature an opinion on this plan. If the Secretary of War has confidence in it, and is satisfied to adopt it, I have no objections. A. Lincoln.

Approved by the Secretary of War. Simon Cameron.

It will be observed, that Mr. Stager, in the foregoing plan, made no suggestion for military rank for any one. Indeed a military commission was not considered until Quarter-master General Meigs insisted upon it as necessary, before he could honor Mr. Stager's requisitions for money and supplies. In peace times this would have proved a great obstacle, because there was no more law for such an appointment than there was for commissioning every operator in the service, in like manner; the only difference consisted, not in the legal view, but in the requirements of the service. No body ever deemed it necessary

or even proper, that operators, as such, should be quarter-masters, and yet there were times when they suffered because they were not. Meigs' views prevailed, as the following shows :

WAR DEPARTMENT, Nov. 11, 1861.

MAJOR GARESCHE, Act. Adj. Gen.:

Please make letter of appointment for Anson Stager, Esq., as Brigade Quarter-master. This was arranged by the Quarter-master General and the Secretary of War before they left. Mr. Stager is to be detailed as General Superintendent of Government Telegraphs in all the departments, and will in future attend to the organization of that Department. Very respectfully,

THOS. A. SCOTT, *Asst. Sec. of War.*

WAR DEPARTMENT, Washington, Nov. 11, 1861.

SIR : You are hereby informed that the President of the United States has appointed you Assistant Quarter-master of Volunteers, with the rank of Captain in the service of the United States, to rank as such from the eleventh day of November, 1861. Should the Senate, at their next session, advise and consent thereto, you will be commissioned accordingly. * * Should you accept, you will at once report in person, for orders, to the Quarter-master General, U. S. A. THOS. A. SCOTT, *Act. Sec. of War.*

TO CAPTAIN ANSON STAGER, *A. Q. M. Vols.*

HD.-QRS. OF THE ARMY, Washington, Nov. 25, 1861.
Adjutant General's Office.

SPECIAL ORDERS, No. 313.

Captain Anson Stager, A. Q. M. is assigned to duty as General Manager of the Telegraph lines. Upon Captain Stager's requisition, or that of his assistants in their respective military departments, commanding officers will furnish the employés in the field, connected with the telegraph lines, with rations in kind and shelter, such as is allowed to other government employés. Commanding officers will also give such aid as may be necessary in the construction and repair of telegraph lines in the country in which troops are operating. By command of Major General McClellan.

L. THOMAS, *Adjutant General.*

Captain Stager soon discovered that, in sending to distant assistants, large sums, often amounting to one hundred thousand

dollars, for which he obtained no recognizable receipt until the signed vouchers of employés were obtained, he was running too much risk. Moreover, quarter-masters' complained that there was no lawful warrant for their recognizing the requisitions of his civilian assistants, and consequently he obtained commissions for them, as follows: Major Thos. T. Eckert, Department of the Potomac, July 17, 1862, Captain T. B. A. David, Department of West Virginia, July, 1862; Captain Samuel Bruch, Department of the Ohio, August 8, 1862; Captain Randall P. Wade, Purchasing Agent, about September 28, 1862; Captain Chas. H. Bulkley, Department of the Gulf, January, 1863; Captain George H. Smith, Department of Missouri, September, 1862; Captain William G. Fuller, Department of Tennessee, October 27, 1862; Captain John C. VanDuzer, Department of the Cumberland, October 27, 1862; Captain William L. Gross, Department of Ohio, October 27, 1862; Captain Lemuel F. Sheldon, Department of the South, October 31, 1863; Captain James R. Gilmore, Department of the South, November 3, 1864. These were all assigned to service as assistant quartermasters. Captain Stager, in anticipation of these appointments, was commissioned Colonel, February 26, 1862, and attached, as aide-de-camp to the Secretary of War, but in April, 1863, owing to ill health from overwork, he took permanent quarters at Cleveland, Ohio; he was, however, frequently in personal attendance at various military points.

In these arrangements the operator, who braved nearly all the dangers incident to the service, was left a mere civilian; only a quarter-master's employé, liable to draft, his salary taxed, and he, surrounded by all the paraphernalia of war, to the conduct of which he was so essential, was without rank, name or position, subject to the unkind cuts of the envious, but thoroughly appreciated by the President, his cabinet and the generals.

Thus organized, the United States Military Telegraph became the medium of communication by which hundreds of thousands of armed men were directed from point to point, commissary, subsistence and ordnance stores ordered, and the innumerable necessities of great armies made known, as well as the story of their victories and defeats. A word now about its chief.

Anson Stager.

Replete as is the telegraph history in America with the names of successful devotees of that science and art, probably none of them have had such steady, conservative and well grounded prosperity as Anson Stager. His has been no fitful, spasmodic advancement, nor the preferment of wealthy relatives, but the result rather of methodical attention to duty undertaken. As an operator, he soon became an appreciative and attentive expert. In his day at the key, none excelled him, either in precision or rapidity. It was while in the foremost rank as an operator that he was invested with executive departments, the management of which brought new confidence and increased responsibilities. These multiplied with the astonishing increase of telegraphic business and the facilities therefor, until he became a leading executive head of the most gigantic telegraph company the world ever produced. The history of his success since the rebellion is beyond the purview of this work, and therefore, notwithstanding it would give valuable hints to others seeking honorable preferment by first deserving promotion, it must be left to others.

Anson Stager was born, April 20, 1825, in Ontario County, New York. While but a boy, he began to learn the printer's art in the office of Henry O'Reilly, in Rochester, New York. That he succeeded well, those who know his subsequent career need not be told, for General Stager is but a development of the boy he was; conversely stated, he is a strong illustration of the adage, that "the child is the father of the man." But "there's a divinity that shapes our ends," so largely are we "creatures of circumstance," and so it was with young Stager, for when fairly embarked in the business of his first choice, a novel factor in business affairs induced a new ambition. This was when Stager had just reached his majority (1846) and but two years after Morse had demonstrated the practicability of his system of telegraphing; a time when capitalists were, however, full of doubts and misgivings. Henry O'Reilly became enthusiastic over the telegraphic outlook, and induced his *protegé* to follow him into this undeveloped business enterprise. O'Reilly connected Philadelphia with Harrisburg, and in the fall of 1846,

Mr. Stager assumed charge of his first office, viz., at Lancaster on this line. Pittsburgh was added to the circuit, and after a short service at Lancaster, Stager assumed the management of the operating room in the former city.

By this time, every considerable town was seeking telegraphic connection, and the O'Reilly lines were pushed over a vast expanse of territory, north, west and south. Cincinnati became a repeating station of great importance, and Stager's success at Pittsburgh made his promotion to a like position at Cincinnati a matter of course. He had now come to the front rank among the manipulators of the key and comprehended what was then known of the science. With that science he has kept pace, even doing much to develop its phenomena. It was he who first economized batteries by charging many wires at the same time from one source. He also connected long lines, thus saving time and risk of repetition of messages. These things are now so commonly done as to excite no attention, but in their origin they evidenced individuality and originality which gave Mr. Stager much prestige.

While thus serving at Cincinnati, the New York & Mississippi Valley Company's lines were projected, connecting Buffalo, New York, with Louisville, Kentucky, and Mr. Stager was made general superintendent thereof. An eastern outlet to New York City was leased the following year (1852). A short time after, under the inspiration of other Rochester men, the Western Union Telegraph Company was organized, and (1856) many other companies were glad to consolidate their doubtful interests with it. Thus that company may be said to have begun its entity by a systematic effort to control the field; a purpose it never relaxed, for with building and leasing, it now practically controls the telegraphic facilities of a continent.

Mr. Stager has been identified with this growth from its early efforts until recently. As its general superintendent, in 1856 he located at Cleveland, Ohio, and applied himself with zeal to the restoration of the impaired lines and to the negotiation of contract rights with various railroad companies, whereby their interests were greatly subserved and his own company enabled to overcome opposition and finally become impregnably buttressed in the commercial and other interests of the nation. Al-

though at the beginning of the rebellion the great results subsequently produced were hardly anticipated, yet it is true that they are largely the natural outgrowth of the foresight of such men as Anson Stager and J. H. Wade, who were actively engaged in authoritative positions, laying foundations for that success which since the war has found demonstration in many princely fortunes for the stockholders, who up to the time of the war had not received a dividend.

On one of Stager's many trips in the interests of his company, an engine on the Pittsburgh, Fort Wayne & Chicago Railroad broke down at night, nine miles from an office. Stager cut the wire, and by touching the ends telegraphed to Pittsburgh and Brighton for another engine. By fixing one end of the line above and the other beneath his tongue, which he projected out to view, the electric pulsations gave it a vibratory movement, similar to that of a telegraph armature, which is often used to read from. Thus Mr. Stager could see and read the involuntary oscillations of his tongue, as one can those of an armature, which he may not hear, and thus he received reply that another engine would be sent at once. This feat has not ceased to be remarkable, even in the light of frequent electric surprises. It was while he was superintendent of this company, which position he did not resign, that Governor Dennison of Ohio, telegraphed him to come to Columbus to consult about assuming military control of the telegraphs in that State. Governors Morton of Indiana and Yates of Illinois thereupon invested Mr. Stager with like authority over the lines in their States, and about the same time, as already shown, General McClellan, at Cincinnati, appointed him manager of all lines in his department.

Such is a résumé of the career of the chief officer of the Telegraph Corps, who remained at its head throughout the war.

Confederate States Telegraph Advantages.

Of course, an agency so potent in war as the telegraph, could could not be overlooked, but the Confederates appear not to have regarded it as so essential as did the Federals. Early in the war, the South had resources enough for extending the telegraph from main line offices to all of her armies; but this was not done in Western Virginia, South-western Kentucky or,

to any great extent, in Missouri. There were, as we have seen, in 1861, but two leading telegraph companies in the Confederate States, the American and South-western. J. R. Dowell was general superintendent of the Southern division of the American Company's lines, and on the beginning of hostilities, it is said, by his advice, Dr. William S. Morris, a director in the company, assumed charge as president, and the corporate name was changed to the Southern Telegraph Company. Dr. Norvin Green was president and John Van Horne general superintendent of the South-western Telegraph Company. Judge Reagan was President Davis's Postmaster General, and on the plea of military necessity, was placed in charge of all the lines in the South, but interfered with the private management thereof, as a rule, only as military purposes required. The knowledge of this power, if nothing else, generally made more than nominal control unnecessary.

By an act of the Confederate Congress, July, 1861, the President was authorized to seize all telegraph lines, and appoint agents to supervise all communications passing over them, and forbid all telegrams in cipher and such others as were of an enigmatical character. Whenever a military superintendent's services were required at Richmond, Dr. Morris appears to have received the appointment.

Soon after the capture of Fort Donelson, Nashville was evacuated, and Doctor Green returned to Louisville to manage his company's interests within the Union lines, where he remained till the war was over. Mr. Van Horne stayed South, and acted as president of the company within the Confederate lines.

There was no such thing as a military telegraph organization in the South, except at a few local points. General Beauregard had a regularly organized system, with a full corps of operators, in and around Charleston; J. W. Kates being superintendent until he went to Shiloh with Beauregard, leaving W. R. Cathcart in charge. Mr. Kates was chief operator with Beauregard until near the close of the war, when he took a boat ride with some friends and was overhauled by the Yankees.

The private companies aimed to do the military telegraphing, even with the armies, and, to a great extent, succeeded. A few

operators took service at the head-quarters of the commanding officers and had a sort of military status, but they had very little to do in the Western departments, except when head-quarters happened to be at some small station, where the company's operator was not able to do the work. It was quite usual, however, for operators to be associated with the principal calvary chiefs; many as aides, yet others were soldiers. Indeed, owing to the Northern operators leaving when the war began, and the enlistment of Southern operators in the armies, there was soon felt a great lack of such talent, and the only remedy lay in detailing operators from the ranks, which was done.

One of the first military lines built in the Confederate States, viz., from Pensacola, Florida, nine miles, to General Bragg's head-quarters in the rear of the navy yard and Fort Barrancas, was thus operated, under the management of J. G. Thornton, manager, secretary and treasurer of the Pensacola Telegraph line, whose president, Ch. Le Baron, while acting as aide-de-camp to Bragg, was wounded at Shiloh. The operators detailed for service on this line were William H. Cody, a private in a Mississippi company, and George McCann, private, Seventeenth Alabama regiment.

There had been much *ante bellum* rivalry, and consequent friction, between the American and South-western companies, which the severance of their respective heads did not remedy, and it was believed that Doctor Morris was largely instrumental in obtaining an order for the seizure of the South-western Telegraph Company's property within the Confederacy, on the ground that its officers were Unionists. The order was issued in September, 1862, when a Mr. Caldwell was appointed military superintendent, with directions to possess himself of all of its property and receipts. He established himself in Chattanooga, and issued his commands to the managers of all offices before Van Horne knew of the appointment. At this time John B. Morris was operator at Jackson, the capital of Mississippi. He requested Governor Pettus, to intercede in behalf of the company. Pettus, thereupon, telegraphed President Davis to know the cause of the action, and received the following reply:

RICHMOND, VA., Sept. 11, 1862.

GOV. PETTUS, Jackson, Miss.:

The action was taken on suggestion of telegraph companies, and is designed to protect the Confederate States, and to secure the receipts to the true and loyal owners. The president of the company is with the enemy, and the company is not in condition to fulfill its purposes. (Signed) JEFFERSON DAVIS.

This exposed the scheme, which Van Horne, well seconded by others, was able to frustrate. The order was rescinded.

FORT MONROE LINE.

From the beginning of the war, great interests centered about Fortress Monroe, the Federal stronghold in South-east Virginia, commanding the entrance to the James River, which was navigable to Richmond. This fortress was like a thorn in the side of the Confederacy, and nearer its heart than any other permanent Federal lodgment. It had been the base of Union operations in that neighborhood, and was to be the rendezvous of many military and naval expeditions. When Manager Gilmore succeeded Strouse about Washington, Richard O'Brien took charge at the fortress. General Butler, having arranged to act in concert with Admiral Farragut for the capture of New Orleans, was succeeded in command, on the 18th of August, 1861, by General Wool. While General Butler was in command, he seriously contemplated a direct movement, in force, from this fort, on Richmond, and while General McClellan was organizing his forces about Washington, and so placing them as to indicate an intention to march direct against the enemy in his front, he was, in fact, secretly cogitating over the idea of quickly transferring this army by water to Urbana, on the Rappahannock, or Yorktown, on the York River.

While these two points were under consideration, it was determined to build a telegraph line to Fort Monroe. Two routes presented themselves, the first, suggested by Captain Stager and preferred by the Assistant Secretary of War, was, to extend the line then working from Washington to Budd's Ferry (fifty-three miles), to Port Tobacco and Point Lookout (seventy miles) and thence by submarine cable in the Chesapeake Bay (seventy

miles) to Fort Monroe. This route was impracticable for want of cable, which was not then manufactured in this country to any considerable extent, and there was no time to wait for it. The second, which was adopted, was, to extend the Government line from Lewes, Del., *via* Salisbury to Cape Charles, thence by cable across the Chesapeake (twenty miles). The Lewes line connected with Wilmington *via* Dover, and was built in the fall of 1861.

The Fort Monroe line was begun about the middle of January, 1862, and completed on the 5th of February to Cape Charles, one hundred and fifty-eight miles from Wilmington, at which latter place it connected with the American Company's lines running to Washington. By the use of a repeating instrument at Wilmington, the line was practically one circuit to the War Department. Until the cable was laid by W. H. Heiss, shortly after, a dispatch boat plied across the channel in three hours.

Having now some idea of the military telegraph situation in Virginia and the South, let us again recur to the field of arms.

Affairs about Fort Monroe; The Monitor and Merrimac.

O'Brien's efforts to keep up his line to Newport News was somewhat vexatious, owing to the rebels so frequently carrying off, by night, half a mile or so of wire. Even day incursions were not unusual. On one occasion, in February, he and his little brother, John, assistant operator at the fort, not yet fourteen years old, accompanied by a few negro repairers, on the road toward Newport News, saw in the dim distance toward Newmarket a cavalry force charging down towards them. It being suggested that they were rebels, the darkies took to the woods and did not stop running until they reached Old Point Comfort. Young O'Brien sought to lead them, but he was soon outstripped. He rejoined his brother, who, awaiting the coming of the horsemen, found them Federals.

Probably John O'Brien was the youngest operator ever in the United States Military Telegraph service. He had, in February, 1862, had three years experience, and is said to have been an expert in the art. General Wool was greatly surprised when

he saw the boy receive by sound, which he was doing when Wool first met him.

Fortress Monroe was becoming monotonous, when a new element began to obtrude itself. Rumors of a floating monster absolutely bomb and ball proof, came by contrabands from Norfolk, on the Elizabeth River. They were soon verified, and not long after, tested. Daily, field-glasses swept Sewell's Point, Craney Island and the mouth of the Elizabeth. At last, about noon on the 8th of March, against the sky behind Sewell's Point, black smoke was apparent, which moved ominously nearer and nearer. J. O'Brien, at the fort, signaled Newport News, which lies across the river where the Elizabeth enters the James. George D. Cowlam, a detailed member of Ellsworth's famous Fire Zouaves, was the operator there, and bravely did he remain at his post. Cowlam answered the call; he also had seen the smoke. The hour was pregnant with great events. The alarm-gun signals the men at the fort to their pieces; the long-roll beats the soldiers to arms; the naval vessels clear for action; then over the waters comes the sound of a broadside. But see, *is not the "Merrimac" a monster in truth?* Even the Sawyer gun on the "Rip Raps," vindictive and thunderous, is at work. Young O'Brien is at his instrument, safe enough, to be sure, but full of anxiety as to the result. Suddenly, amid the deep reverberations of the heavy guns, his strained ear catches the sharp click from the sounder. 'Tis Cowlam, and this is what he telegraphs: "She is steering straight for the 'Cumberland'" — a pause — "The 'Cumberland' gives her a broadside" — waiting at the fort — "She keels over" — suspense — "Seems to be sinking" — anxious watching — "No; she comes on again" — great anxiety — "She has struck the 'Cumberland' and poured a broadside into her. God! the 'Cumberland' is sinking" — breathless suspense — "The 'Cumberland' has fired her last broadside."

Thus did the telegraph picture the scenes of that eventful day; some visible and others hidden from the ramparts of the fort. The sorrow depicted on the countenances of the brave officers at the fort on receipt of the news that the "Cumberland" had fired her last broadside, passes pen picturing. But that calamity was not all. The "Congress" grounded near the News

and was raked by the "Merrimac" and her wooden consorts — the "Minnesota," grounded; the "St. Lawrence," grounded, and the "Roanoke," grounded. Truly, the tide was setting against the Unionists. It was a dark hour. The burning "Congress" deepened it. Gallant Cowlam continued at his instrument, describing each new phase in the fight, while the shells shrieked about his quarters, and two tore through his office, within a few feet of him; but there was the same steady hand at the key. At ten P. M., the little "Monitor" arrived. Now let Richard O'Brien's diary tell of the ninth:

At six A. M., the "Merrimac" was seen steaming down the Elizabeth River. General Wool, having placed the fort in fighting trim, rode out with his staff through Camp Hamilton and the ruins of Hampton, to a point on the shore nearest the "Minnesota," which was still aground. I accompanied the party. The "Monitor," which had arrived the previous night, lay under the shadow of the "Minnesota," and seemed to us a feeble defense to lean upon, against the invincible monster which had made such short work of two of our finest war ships the previous evening. When the "Merrimac" passed Sewell's Point and turned towards the fort, we were about to hurry back to help receive her, but when near the "Rip Raps" she turned again and came straight for the "Minnesota," which opened fire upon her. The "Merrimac" slowed up a moment, as if to make out what the strange little craft could be, when Lieutenant Worden blazed away and solved the question for her. She quickly responded. They both "let slip the dogs of war," the rebel bulldogs growling from every port-hole, and the little terrier of the North, more active than her unwieldy antagonist, snarling at every rib of the larger craft. The "Monitor" got around more quickly than the "Merrimac," and tried her sides, quarters and stern, but every shot that struck, glanced from the greased rails into the air, with the scream of a baffled demon. The "Merrimac" fired rapidly and viciously, but seemed equally unable to injure her antagonist, and so turned her attention again to the "Minnesota." The latter discharged a broadside at her without the slightest effect, and received in return a shell from the bow gun of the "Merrimac," which burst in the officers' quarters and set the ship on fire. Another shot struck the tug-boat "Dragon," which was engaged in trying to haul the "Minnesota" off, passing through and bursting its boiler. A terrific fire was kept up by the "Minne-

sota" from every gun that could be brought to bear. A third shell passed over the "Minnesota" and burst unpleasantly near us. Before she could fire again, the "Monitor" had gotten between the "Merrimac" and the "Minnesota," forcing the former to change her base, in doing which, she got aground, but soon swung off and headed for the "Rip Raps," with the "Monitor" close at her heels. They had not gone far, however, when the "Merrimac" turned around suddenly and tried to run into the "Monitor." The latter made a very narrow escape, the great prow of the "Merrimac" leaving an ugly scar on her iron armor. They then pounded away at each other for some time, when the "Monitor" drew off towards the fort. We feared she had received serious injury. The "Merrimac," with her consorts, the "Jamestown" and "Yorktown" (or "Patrick Henry"), which had thus far kept at a respectful distance, now started towards the "Minnesota," which we felt sure was doomed. They changed their course, however, for some unaccountable reason, and heading up the Elizabeth River, left us, for this day at least, masters of the situation.

Great was the joy in the North when news came that the "Monitor" had turned the current of affairs; but greater yet was it in Washington, where boats were laden with stone, to be sunk in the channel in case the "Merrimac" destroyed her adversaries.

The Peninsular Campaign.

The army of the Potomac lay in and around Alexandria eight whole months; to its right, about Harper's Ferry, the Baltimore & Ohio Railroad was sealed up; to its left was the Lower Potomac, vexed by the enemy's batteries. January 13, 1862, E. M. Stanton succeeded Cameron as Secretary of War.

On the twenty-seventh, President Lincoln directed that on the 22d of February a general movement of the land and naval forces of the United States against the insurgent States should take place, and that especially the "army at or about Fort Monroe, the Army of the Potomac, the army of Western Virginia, the army near Mumfordsville, Kentucky, the army and flotilla near Cairo, and the naval forces in the Gulf of Mexico be ready to move on that day.

February 1, McClellan's army contained one hundred and ninety thousand, eight hundred and six troops of all arms, present

for duty. Yorktown was decided upon as the point from which to advance upon Richmond. 113 steamers, 188 schooners and 88 barges were collected to transport 121,500 men, 14,592 animals, 1,150 wagons, 44 batteries and 74 ambulances, besides pontoon bridges, telegraph materials and equipage, etc. The steamer "Commodore" was selected for McClellan's use, and a telegraph line was run thereto from his head-quarters in the old Club House, Washington. By this wire he was advised constantly as to the progress of shipping the army. Jesse H. Bunnell was the operator on the steamer, and A. Harper Caldwell and C. W. Jacques at the Club House. These three were McClellan's operators, and Caldwell was chief. We shall meet them often hereafter, especially Caldwell, who remained with the head-quarters of the Eastern army to the close of the war, earning, by his ability and urbanity, a splendid reputation. Maj. T. T. Eckert accompanied the army, to conduct the telegraphic operations. Parker Spring and L. D. McCandless, under Eckert, had charge of the construction parties.

Major Eckert, Colonel Stager's principal assistant, was a man of energy, tact, perseverance and strong purpose.

His jurisdiction was confined to Virginia, except for a time when he controlled the coast telegraphic operations also, but his position in the East, mainly at the War Department, especially after Colonel Stager removed his head-quarters thence to Cleveland, Ohio, in 1863, gave him a prominence in military telegraphic circles which his ability and devotion fully justified. They even warrant a more extended personal notice than we have space for.

The other day, two men fell out of a balloon, while a third rose to a great height, also to fall soon after into the sea. That well illustrates how accidents facilitate the rise of some men, but, like the lonely aeronaut, they soon sink beneath the waves that encompass them in their short career. Others buffet the elements successfully, because they are well ballasted, and foresee emergencies for which they prepare. He who goes out upon deep waters and weathers the storms, is a captain whom followers like to be near, even as the soldier prefers to fight under generals that win battles. Thomas Thompson Eckert, at this writing, has long been upon the deep waters of life's sea. Many are

the storms he has encountered, and great is the credit he has won, while making a name that crosses the continent, and gaining a position that directs the telegraphic facilities of the United States and Canadas, if not to the shores of England.

He was born in St. Clairsville, Ohio, April 23, 1825 He acquired the telegraphic art in 1848. The next year, he was appointed post-master, at Wooster, Ohio, and united the telegraph and post-offices there under his management. Thus early he set an example, which many contend, should be the rule, instead of the exception, throughout the Union. But Eckert was not to be hampered by small offices. Parties interested in connecting Pittsburgh with Chicago, by the route of the Pittsburgh, Fort Wayne & Chicago Railroad, arranged with him to superintend the construction of their lines. This was performed so satisfactorily that the "Union Telegraph Lines" people, owning this plant, offered him its superintendency. This position he held about four years, when (1856) his company was merged into the "Western Union," and his jurisdiction enlarged. In his wider field, he labored zealously for about three years, exhibiting many of those qualities which his later years and increased opportunities gave full scope to, and with proportionate results.

In 1859, Mr. Eckert removed to North Carolina, where he was superintending the operations of a Gold Mining Company, when the war began, but which he abandoned for a Northern home, pending hostilities, at least. Thus he was free to engage in any service wherein he could best serve the nation. The military telegraph proved his affinity, and in its ranks he continued to the close of the war. April 7, 1862, he was commissioned major and aide-de-camp, on General McClellan's staff, to forward his telegraphic operations, and for that purpose he was now with the army.

McClellan confronted Magruder about the 5th of April, near Yorktown. Magruder's force was about one-tenth of his adversary's, but, deceived as to the topography of the country and the number of Magruder's increasing force, McClellan laid siege until May 4, when the enemy, much strengthened, evacuated, and thus avoided an assault.

Telegraph lines had been extended to all the Federal head-

quarters on the Peninsula, including Fort Monroe, twenty-seven miles, and Ship Point, twelve miles from Yorktown. Besides those at McClellan's, there were at this time with the army, and on the line of communication to Washington, the following operators with McClellan's army: D. B. Lathrop, H. L. Smith, John Allen, George B. Cowlam, F. A. Lawrence, R. F. Follett, Wilbur F. Halloway, J. Harvey Nichols, Thomas Morrison, Theo E. Moreland, T. M. Schnell, J. R. Waite, Joseph Schnell, A. C. Schnell, George W. Nail, Chas. A. Tinker, J. H. Emerick, W. H. Shreffler, Crosby J. Ryan, J. B. Norris, H. A. Bogardus, M. H. Kerner and E. H. McGintey; reinforced in June by Thos. Dolan, F. H. Fonda, J. La Bonte, C. H. Lithgow, E. N. Robinson, O. H. Booth, C. L. Snyder, F. A. Stumm and G. D. Wilkinson. At Fort Monroe were the O'Briens and George D. Sheldon; Cherrystone, G. W. Baldwin; Drummondstown, Delaware, P. H. Nunan; Salisbury, S. R. Magonigle (June); Lewes, John Wintrup to June, and R. Power, Jr.; Harrington, C. M. Roberts; St. Georges, H. P. Royce; Wilmington, L. A. Rose, J. W. Hallum, R. Power, Jr. to June, John Wintrup and T. M. Schnell.

The operators with the army kept McClellan fully advised as to all operations in front. It was worth regiments of soldiers to *know* that an attack on any point of McClellan's lines, many miles long, would be reported in time to be promptly met. It was worth "a mint of money" to the people of the North, to receive daily, detailed reports of operations about Yorktown; but it was somewhat dangerous business for the telegrapher at the front. Parker Spring and builders, on the 20th of April, while building a line toward the James, were driven off by the enemy. Emerick and Nail, at Richardson's head-quarters, on the left of Yorktown, were just out of range of the shells ; but the operator with General Porter was not so fortunate, although unhurt. A shell fired from a Whitworth gun buried itself in the ground just sixteen feet from Nichols' tent, and exploding, scattered gravel and dirt in all directions, nearly blinding the operator. General Heintzelman ran to Nichols' relief, but, happily, no help was required.

Jesse Bunnell was on duty alone at McClellan's when, after two in the morning of the 4th of May, various telegraphic posts

began sending, in rapid succession, startling messages, announcing the evacuation of Yorktown. And now the telegraph must move this great army in pursuit. Transmitting orders to one point and another, at the rate of forty words a minute to any given post, was the work of the operator; and so well was it done that before the enemy could pass Williamsburg, scarce twelve miles, he had to turn and fight. It was a glorious start.

War always produces instances of diabolism. Unhappily, this was not to prove an exception, and we have to record a cowardly example of it.

D. B. Lathrop, a bright youth from Mount Vernon, Ohio, a student, of cultivated tastes, who would walk ten miles to hear an opera or a lecture, entered the telegraph service at the Navy Yard, in June, 1861, and remained there until the Fort Corcoran office was open in August, when he took charge of that. In September and October, he was at General Smith's head-quarters office, and in November at Fort Lyon, where he stayed until December, when he took the Camp Griffin office—all in or near Washington. At this latter office, he manipulated the telegraph key until McClellan's army was ready to move on Yorktown, when he was ordered to accompany it. He and his comrade, H. L. Smith, were the first operators to enter deserted Yorktown, and, naturally enough, he hurried to the late Confederate telegraph office, to test for circuit with Richmond; but the wires were cut and left hanging from the pole, and, in going to the pole, poor Lathrop stepped on one of the many torpedoes buried thereabouts. It exploded, tearing one leg almost off, and otherwise injuring him. In distressful agony he lived but a few hours, and then passed away. The surgeon in charge tried to administer stimulants, which Lathrop persistently refused, saying he did not want to die drunk. Sadly, indeed, the operators who could, gathered around him; but mortality could not stay immortality, and the soul of that cultivated youth passed from the horrors of war, to a realization of unending peace.

The operators, to evince their appreciation of their meritorious and genial comrade, and to assuage grief as much as possible, caused his body to be sent home, escorted by two fellow operators, and erected a monument where it lies interred.

Before proceeding up the Peninsula, let us look down the Atlantic coast.

A Parenthetical View of the Coast.

August 29, Forts Hatteras and Clark, commanding the Hatteras Inlet to Pamlico Sound, were taken by a naval and land expedition, under Com. Stringham and General Butler. Then followed Com. DuPont and General T. W. Sherman's expedition against the coast defenses below Charleston, S. C., of which hereafter.

February 5, 1862, another naval and land force, commanded respectively by Com. Goldsborough and General A. E. Burnside, entered Pamlico and Croatan Sounds, capturing the defenses thereabouts and many prisoners. A few days after, Newbern, Morehead City, Beaufort, Washington, Plymouth and Elizabeth City were taken, and Norfolk itself was threatened late in April. Burnside's operations on land, in connection with McClellan's on the Peninsula, made Norfolk untenable, and accordingly, the insurgents evacuated the city, and re-inforced the army confronting McClellan. General Wool occupied the place on the 10th of May, and also the Navy Yard and Portsmouth, without resistance.

Sewell's Point and other defenses, on the Elizabeth, were now doomed, and the Virginia, *alias* Merrimac, was destroyed by her commander. This led to the easy opening of the James River, as far as Fort Darling, only a few miles from Richmond.

Major Eckert was now directed to build a telegraph from Newport News to Portsmouth, and thence to Suffolk, which city the Federals also occupied. A cable, four miles long was laid across the James to Sewell's Point, and thence this line was put up to Suffolk, *via* Norfolk and Portsmouth, a stretch from Fort Monroe of about forty miles. Wilbur F. Holloway opened the Norfolk office at the head-quarters of General Mansfield, and John E. O'Brien was sent to Suffolk. His brother, Richard, was subsequently made chief operator on the line, and also located at Norfolk. Holloway remained at Norfolk until the close of the war, doing temporary service, however, at neighboring head-quarters.

McClellan's Operations Resumed.

The telegraph kept pace with the army. At times, it may be said almost to have preceded the advance; but there was no great obstacle thereto, except the objections which the Confederates interposed. Indeed, their own line was not altogether destroyed. Between Williamsburgh and Yorktown, it was nearly intact.

May 16, the line was broken between Yorktown and Williamsburg. Emerick and Dolan volunteered to repair it, but having no horses, they had to walk ten miles to mend the wire. The commanding officer at Williamsburg refused leave to return without an escort, as the country was infested by guerrillas, and an officer had been ambushed and killed on the road the day before; but taking their chances, they did return alone, without meeting a human being.

When Jacques reached White House Station, on the Pamunkey River, where the railroad leading from Richmond to West Point was struck, he felt an electric current from the Richmond telegraph office, but before an instrument could be attached, the the circuit was gone.

Despatch Station, on this railroad, was selected as a depot of supplies, and railroad rolling stock, brought on transports, was placed on the track at White House, the new base, May 27. Moreland and Emerick were operating at Despatch Station, sixty miles from Yorktown. Allen and Morrison, sick with fever, did the work at White House, while lying down.

The army moved slowly. Two weeks after the evacuation, it met most stubborn resistance fifty miles from Yorktown, where it was immured in the swamps and poisoned by the malaria of the Chickahominy. It is said that there were fifteen thousand soldiers in the hospitals at Fort Monroe, Newport News and Yorktown. At this time, a single cord ran from McClellan's office to Wilmington, Delaware, the atlas and axis of the North, whence nerve lines of electric touch radiated. Wilmington was in truth the nerve center. Is it remarkable that, as the news of the sick, dying and dead loved ones shocked the sensibilities of sympathetic souls, emotions akin to despair fevered and racked the brain — the North — and that when tidings came

LIBRARY OF THE UNIVERSITY

that the army lay astride a treacherous stream, in which position thirty-five thousand soldiers were nearly useless, while a great struggle progressed along the south bank, the head ached and paralysis threatened?

The battle of Fair Oaks was fought May 31. General J. E. Johnston, having discovered that the Federal army was in two parts, the suddenly swollen Chickahominy between them, sought to destroy that portion on the south bank before the other could cross, and he was nearly successful. But Sumner succeeded in crossing Sedgwick's division; Johnston was severely wounded; night set in, and the army saved.

But at what a sacrifice! After all, liberty costs more than any thing else, except slavery. Listen a moment to Prince de Joinville (Orleans) of McClellan's staff:

> Ah, I wish that all those who, careless of the past and urged on by, I know not what selfish calculations, who have encouraged this fatal slaveholder's rebellion, could have looked in person upon this fratricidal strife. I could ask, as a just punishment, that they should be condemned to gaze upon that fearful battle field, where the dead and dying were piled up by thousands. What varieties of misery! The houses were too few to contain even a small minority of the wounded. They were necessarily heaped up around the field. Though they uttered no complaints, their exposure, under the burning mid-day sun of June, soon became intolerable. Then they were to be seen gathering up what little strength was left in them and crawling about in search of a little shade. I shall never forget a rose-bush in full bloom, the perfumed flowers of which I was admiring while I talked with a friend, when he pointed out to me, under the foliage, one of these poor creatures, who had just drawn his last breath. We looked at one another in silence, our hearts filled with the most painful emotions. Sad scenes! from which the pen of the writer, like the eye of the spectator, hastens to turn away.

Had Fair Oaks been the conclusion, instead of an interlude, what agony would have been prevented. It determined nothing, and the next day came Seven Pines, when the Confederates were driven pell-mell over the ground they took the day before, and Hooker advanced within four miles of Richmond.

McClellan's army, June 14, having been re-inforced, numbered one hundred and fifteen thousand, one hundred and two present for duty. General Robert E. Lee assumed personal command of the Confederate forces after Johnston's fall, and Stonewall Jackson's troops, flushed with victory, hurried down from the Snenandoah Valley, increasing the Confederate forces to over eighty thousand; but McClellan had reason to believe them stronger, and hence determined to move to the James River, seventeen miles distant from Fair Oaks.

June 26, was fought the battle of Mechanicsville; June 27, that of Gaines' Mills, to which place Porter had retired from Mechanicsville. It was important to hold his position north of the Chickahominy until night, when he was to retire towards the James and destroy the bridges. Jesse Bunnell had been temporarily sent to Porter's head-quarters telegraph office at Mechanicsville, shortly before the battle, and on the morning of the twenty-seventh, in falling back to Gaines' Mills, having no horse, missed the main line of movement and got out of his proper course. About one P. M., Porter was being pressed very hard. At this hour Bunnell struck a road along which a telegraph line was strung; here, also, he discovered that a line of battle was being formed for a stand about one hundred yards to the rear. So he cut the telegraph line, and, connecting his instrument, sat down behind a tree and called "Mc," the head-quarters office call, which Caldwell would never change, no matter who was commander. Caldwell was prompt to reply. McClellan and the officers about him regarded the opening of telegraphic communication at that point and moment as a godsend. Bunnell having no orderlies, General McClellan sent a telegram to him to stop the first mounted officer or soldier passing that road, and order him in McClellan's name to take a message to Gen. Porter to send Bunnell fifteen mounted orderlies, and to communicate with McClellan at once by telegraph. This was done, and for several hours Bunnell sat very close to that tree and sent and received many messages as to the progress of the battle, of which Bunnell was himself receiving a very fair sample. The roar of contiguous cannon, the crack of musketry, the Federal cheers and Confederate yells, added to the bursting of unnumbered overshot shells and the zip, zip of bullets, and the solid shot

crashing through the trees, were not favorable to telegraphing by ear. But Bunnell was one of the best telegraphers in the country, although yet in his teens. Several times Porter telegraphed for re-inforcements. Longstreet and A. P. Hill were not easily shaken off. At two P. M., Porter telegraphed for aid and Slocum's forces came across the river. An hour later, other troops were crossed to the rescue, for though Porter now had thirty-five thousand men he was hard pressed. At four o'clock Jackson had come to help Hill and Longstreet; then D. H. Hill and Ewell fell upon Porter. The carnage was awful. It seemed as if nothing human could withstand it; many, aye very many were killed. Bunnell's orderlies were brave fellows; several of the messages he handled were bespattered with their blood, and he was obliged to forward his telegrams to Porter by two or three messengers, as several were shot on their way. More troops were required and more answered the telegraphic call. McClellan was fighting the battle by telegraph.

NICHOLS' OFFICE.

What confidence to repose in a beardless operator, unhonored to this day.

French and Meagher came in the nick of time. Porter was being pushed back and fugitives were rushing for the bridges.

The whole line fell back and Bunnell with it, but French's and Meagher's troops rent the air with cheers as they moved against the enemy, who now recoiled, not knowing how near success they were. At eleven o'clock Bunnell reached McClellan's headquarters, and that night Porter crossed and blew up the bridges. But the dead and wounded, nine thousand Federals, perhaps as many or more Confederates; theirs is the sad story of war.

During this day, the depot at the White House was abandoned, and telegraphic communication to that place was cut off by the Confederates at eleven A. M., the next day, leaving the North in cimmerian darkness. Except when the line was broken near Williamsburg, as stated, and by General Stuart, when he made his raid to the rear of McClellan's army, June 13, communication with the North had been almost uninterrupted until after the battle of Gaines' Mills. The worst news is oftimes a relief to an over-anxious mind. Mechanicsville had foretold that a climax was approaching. Gaines' Mills was duly reported from a strictly Federal standpoint, and the Northern people hoped that the next news would hail from Richmond. But they remembered Bull Run and how McDowell's telegrams had presaged victory, and the silence that followed, owing to the suppression of news at the War Department, then the shock that came. These things were yet fresh to them, and they feared an opening of the old wound. It *was* opened.

June 28, the Federal army was *en route* for the James; twenty-ninth, the battle of Savage Station occurred; thirtieth, that of Frazier's farm; July 1, Malvern Hill; second, the army reached Harrison's Landing on the James, and there it lay until August 14.

Operator Nichols was with General Sumner during his retreat from Seven Pines to Harrison's Landing. The field line during the last day's stay, ran from McClellan's, at Savage Station, to General Smith's, at the farther end, to the right of the railroad near Seven Pines. Sumner, about Seven Pines, was nearest the enemy. On retiring, that officer directed Nichols to leave the wire intact, as Smith might wish to communicate with McClellan. When Sumner reached the railroad, he found General Thomas Wilson, Chief Commissary of the Army of the Potomac, and immense quantities of subsistence

and commissary stores. Sumner wanted to talk with McClellan and Smith, but Nichols had only three feet of wire with him, and did not wish to ground the main line, thereby cutting off either McClellan or Smith. Accordingly, with General Wilson's aid, he piled up hard-tack boxes to the top of the telegraph pole, and opened an office there without breaking the circuit. This office he kept open for several hours after dark. To see to write, he had a lantern, but, unfortunately, it afforded the enemy an excellent mark, and they were not slow to open their artillery against this office. The cracker boxes sustained considerable fire, but the office was not closed until ordered by Sumner. During the battle of Mechanicsville, Nichols bravely hastened to a division head-quarters, four miles from McClellan's, where he worked an instrument just in the rear of our artillery, which was firing all the time, and in turn receiving the enemy's attentions. It was one of the most dangerous positions. Some distance behind him, others sought the protection of bales of hay. At this time Nichols was under eighteen.

The Peninsular campaign had been severe on the Telegraph Corps. One was killed at Yorktown. Several lay there sick; others with the army were barely able to hold a pencil. C. H. Buck worked at General Franklin's office when too sick to sit up. Emerick was nearly dead, but Frank Stumm would somehow find chickens and other extras, so that the poor fellow reached home, and recovered.

A telegraph builder who was up a pole when a Parrott shell passed just under him, became temporarily insane from fright, and, late that night, aroused his fellows by brandishing a saber he had somehow obtained, and with which he was stoutly beating off imaginary foes.

It is said that near Harrison's Landing, a tent, protecting a number of the telegraph party from the rain, was suddenly upset by a shell, sent in with the compliments of the Confederates.

Just as the retreat began, a darkey was sent to operator Embree with a horse and ten days' provisions. The contraband stole the horse and provisions, leaving Embree to walk. He walked all day, and, about dark, tried to *borrow* a horse that was standing alone, tied to a tree. After a short ride, a great

big German officer galloped up to him, and, in thundering tones, demanded in a mixed brogue, "What for you was doing mit mine horse?" Embree had pressing business just then with the crowding soldiers, and, hurriedly dismounting, mingled among them. He walked in peace to the Landing.

Turning from the Peninsula, let us examine the operations of co-operating forces.

McDowell's, Banks' and Fremont's Operations.

Prior to his going to Yorktown, McClellan organized his forces into *corps d' armee*, commanded respectively by McDowell, Sumner, Heintzelman and Keyes; a fifth, under Banks, to include the troops in his department along the Upper Potomac, was also formed. This corps was to open and protect communication over the Baltimore & Ohio Railroad, and, in conjunction with troops to Banks' right, to guard Maryland and Pennsylvania from surprises in force down the Shenandoah Valley, and if need be, lend a helping hand for the defense of Washington, while McClellan was on the Peninsula. March 11, McClellan's authority was limited, so that he need not be annoyed pending his own great operations, and General Halleck's command was made to reach east to Fremont's department.

Fremont had risen again to the surface, and was placed over the newly created Mountain Department, the west side of which was an imaginary north and south line running through Knoxville, Tennessee, and the east side was bounded by McClellan's Department of the Potomac.

T. J. Jackson (better known, since the battle of Bull Run, as Stonewall Jackson) was in command of the Confederates in the Shenandoah, with head-quarters at Winchester. About the 1st of January, 1862, he moved against Romney; but the force there was apprised of his coming, and being inadequate for the defense of the place, evacuated it at midnight. S. G. Lynch, since brevetted lieutenant colonel in the Telegraph Corps, was the operator at Romney at this time. He can exhibit, to this day, an old musket and his telegraph table, which he brought off with him, as proof that he fell back in good order. On

reaching Springfield, about half way to Green Spring Run, he connected his instrument with the line and reported progress.

Banks crossed the Potomac at Harpers Ferry, and Jackson, who was in his front, occupying Winchester with considerable force, after some opposition to Banks' progress, left there, March 11, and moved up the Valley. Telegraph lines were working to Washington from Harpers Ferry, and, under L. D. McCandless, the line was built or repaired as Banks advanced on Winchester. Indeed, by the use of a hand car, found on the railroad which connected the Ferry with Winchester, the builders, at some personal risk, succeeded in reaching the place with the advance, much to Banks' surprise and gratification. R. R. McCaine and Frank Drummond opened the office, and Winchester became a part of the telegraphic union. Shields and Williams commanded, respectively, the two divisions of Banks' force. Shields pursued Jackson to New Market, when the latter turned on him, and the battle of Winchester followed. Williams's division had started for Centreville, and had nearly reached Harpers Ferry, Banks with it, when he was telegraphed that a serious battle was in progress; but before either Banks or reinforcements could reach the place, Jackson was badly whipped. However, he soon made up for it.

Retiring a little south-east of Harrisonburg, Jackson watched from his pivotal position, Fremont on his left, Banks in front, and McDowell on the right. These forces aggregated about sixty thousand men. Forty-one thousand of them would have joined McClellan and triumphantly entered Richmond, had they not been maneuvered away by Jackson's audacity. Fremont and Banks were telegraphed to effect a junction, and, to that end, Fremont, taking with him E. O. Brown and J. B. Pierce, operators, proceeded to Franklin, *en route* for Harrisonburg. General Milroy, with the advance of Schenck's division, had not gone far after crossing the Shenandoah mountains, when Jackson, who had been advised of Fremont's movement and knew that a junction with Banks would drive him out of the valley and leave Staunton and Lynchburg tempting prizes for the Federals, now, being re-inforced by Ewell and Edward Johnson, left Ewell to watch Banks, and, falling upon Schenck's troops, especially at

McDowell, May 8, drove them back to Franklin, the terminus of the United States Military Telegraph.

Jackson retraced his steps and joined Ewell, when, with a force of fully twenty thousand, reported at Washington to exceed forty thousand, he, late in May, began his famous raid down the valley of the Shenandoah, which was to carry and did carry dire confusion to the Federals in Pennsylvania, Maryland and the District of Columbia.

The Confederate cause was now in desperate straits. Federal victories in the West, of which hereafter, and McClellan's slow, but steady approach on Richmond, made movements the result of desperation rather than of desire.

At this time, McDowell was at Fredericksburg, about forty-five miles from McClellan's right wing, and expected to move with forty-one thousand men, May 25, to join McClellan. That accomplished, and Richmond was doomed; but now that its speedy capture seemed certain, Washington itself was menaced, and Banks was retreating rapidly to Winchester before overwhelming numbers, under Jackson. If Jackson destroyed Banks' army, there was no sufficient force between him and the Federal capital to protect it. McDowell's main force was seventy-five miles south-west of Washington. Let us turn aside, and see how he came to be there.

The telegraphic correspondence that took place in May, June and July, between McClellan and Stanton and Lincoln, is one of the prominent features of the campaign. Several divisions were sent McClellan on the Peninsula. Altogether he had, during his campaign, about one hundred and sixty thousand effective troops, but not at any one time. June 28, he telegraphed Stanton: "If I save this army now, I tell you plainly that I owe no thanks to you, or any other person in Washington. You have done your best to sacrifice this army." That was while nine thousand Federals lay dead or wounded around Gaines' Mills. Those feverish words may expose the sender to criticism, but they do not militate against that efficient co-operation which McClellan vainly counted on to effect the capture of Richmond and the destruction of the Confederate army. Our "hind-sight" is often clearer than our foresight. Burnside was on Roanoke Island and thereabouts, with nineteen thousand troops. McDow-

ell had forty-one thousand; Banks and Fremont about as many as Burnside. There was force enough, but it was not well located. Huger brought twelve thousand from Norfolk, and Branch nine thousand from Burnside's front at Newburn, to aid in defending Richmond. Nevertheless, some critics say McClellan could have taken Richmond, and, in the light of facts now well known, perhaps the historian now is wiser than the General then was. It was in response to McClellan's call for help that McDowell, eager to advance, was now within four days of McClellan, with a powerful army.

When McClellan left Washington, he intended General Wadsworth's forces in the District, numbering nineteen thousand, but understood by McClellan to exceed that number, to be left for the protection of Washington; but the President, on Wadsworth's representations, retained McDowell's corps also. And collecting forty-one thousand men as stated, McDowell was about advancing to connect with McClellan's right wing, which had been thrown northwardly to meet McDowell, when (May 24) he received the following telegraphic order from the President:

> You are instructed, laying aside for the present the movement on Richmond, to put twenty thousand men in motion at once for the Shenandoah, moving in the line, or in advance of the line, of the Manassas Gap Railroad. Your object will be to capture the force of Jackson and Ewell, either in co-operation with General Fremont, or, in case want of supplies or transportation interfered with his movements, it is believed that the force which you move will be sufficient to accomplish the object alone. Reports received this moment are that Banks is fighting Ewell, eight miles from Harpers Ferry.

To which McDowell replied: "The President's order has been received, and is in process of execution. This is a crushing blow to us." The President, responding, said: "I am highly gratified by your alacrity in obeying my orders. The change was as painful to me as it can possibly be to you. Every thing now depends upon the celerity and vigor of your movements." General McDowell then telegraphed the President as follows:

I obeyed your order immediately, for it was positive and urgent, and, perhaps, as a subordinate, there I ought to stop. But I trust I may be allowed to say something in relation to the subject, especially in view of your remark that every thing depends upon the vigor and celerity of my movements. I beg to say that co-operation between General Fremont and myself, to cut off Jackson and Ewell, is not to be counted upon, even if it is not a practical impossibility; next, that I am entirely beyond helping distance of General Banks, and no celerity or vigor will be availing so far as he is concerned; next, that, by a glance at the map, it will be seen that the line of retreat of the enemy's forces up the valley is shorter than mine to go against him. It will take a week or ten days for the force to get to the valley by the route that will give it food and forage, and by that time the enemy will have retreated. I shall gain nothing for you there, and lose much for you here. It is, therefore, not only on personal grounds that I have a heavy heart in the matter, but I feel that it throws us all back from Richmond, north. We shall have a large mass paralyzed, and shall have to repeat what we have just accomplished.

On the twenty-fifth, the President telegraphed McClellan:

If McDowell's force were now beyond our reach, we should be utterly helpless. Apprehensions of something like this, and no unwillingness to sustain you, has always been my reason for withholding McDowell's force from you. Please understand this, and do the best you can with the forces you now have.

Fremont, at Franklin, was likewise telegraphed to cross the mountains to Harrisonburg, to intercept Jackson's retreat. Manassas Junction and the railroad leading therefrom northwesterly to Strasburg, and thence up the valley to Woodstock, were in McDowell's possession.

Thomas Q. Waterhouse and Charles W. Moore were operating at the Junction about this time. The office was in a one-roomed shanty, where the operators also kept bachelor's hall. Their furniture was not artistic, but it was whole. A box, on which the instrument rested, served also as a dining-table. A single nail-keg answered for chairs. Some old broken pieces of iron, held together by telegraph wire, was called the cooking stove. A coffin, stolen somewhere, constituted the chamber

set. The only objection to it, was, that the sleeper had to get out to turn over. As the operators worked alternate shifts, one blanket answered for both. Of course these appointments necessitated a servant. A young gentleman of color, named Delaware, attended to the cooking and dusted the furniture.

When Banks began falling back, Waterhouse and Richard Graham, operators, were ordered to go by special train up the road. Graham stopped at Thoroughfare Gap, and Waterhouse went on. Frank Lamb, operating at Alexandria, and Moore took the same train for the pleasure of the trip, and to open new offices. William McIntosh, who had just completed the line over this route, went also. Operator F. T. Bickford was well out on the line, but somehow joined the party. On the valley wire, Henry C. Buell, William C. Hall and C. H. Lounsberry operated at Strasburg, probably, however, one of the latter two had been relieved by the other at this particular time. Frank Drummond and Thomas Armor attended the Winchester office. These telegraphers little dreamed of the active realities in store for them. Jackson was hurrying to strike Banks' troops under Colonel Kenley first, at Front Royal, and then wherever he could hit hard. The special train ran into the enemy's advance, and probably was cut off. Anyhow, the telegraph party began playing hide and seek. Waterhouse sought to reach Rectortown, where Ed. Conway operated for General Geary. He succeeded, and, covered with mud, was sleeping on a fine bed when Conway roused him, as Geary was retiring to White Plains. The rest of the party, when within a mile of Front Royal village, heard that Kenley's nine hundred men were gallantly resisting Stonewall Jackson's forces. Kenley was no match for his antagonist, and seven hundred Federals were captured. The telegraphers were in a trap, but they still aimed at Manassas Junction. Bickford thought his chances better alone, so he took his own way. Traveling near a mile further, the rest saw Jackson's men, just ahead of them, tearing up the road and destroying the telegraph; so the telegraphers fell back toward Strasburg in hot haste, only to discover another force of cavalry which had struck the road behind them. Winchester was now their *dernier ressort;* so, striking out that way, they had pushed on some five or six miles and began to feel easier and wonder if Bickford, who had betaken

himself to the fields, did not wish he was with them, when, lo! Ashby and Flournoy's cavalry and artillery came thundering down the road—the Confederates every now and then making the woods ring with their fearful yells. Lamb, McIntosh and Moore had just time to jump, unobserved, a stone fence along the roadside, where they lay exceeding close as the cavalry went tearing by.

Nothing daunted, the boys now started for the Shenandoah, wondering if Bickford had not, after all, judged wiser than they. Night set in, and with it darkness. They were strangers in a strange, inhospitable land. They knew not which way to turn, so they followed their noses. A man who takes such a guide, travels a weary way, and so they did, except when crawling on their stomachs most stealthily, to evade the enemy's pickets. In this they were aided by his camp fires. By and by, all "weary and worn, tattered and torn," they reached some unoccupied negro quarters. Fatigued and hungry, they overslept. When they awakened, three men were standing near, but the muzzles of their guns were in bold *un*-relief before the luckless trio. The boys awoke to a serious realization of misplaced confidence. They had slept on Colonel Dearmont's plantation, and the Colonel and two soldiers were behind those guns. However, the telegraphers held out for terms, and so it was stipulated that Dearmont should give them something to eat. This done, they were taken to Front Royal—to the Federals—but the Federals were Kenley's captured men. Next day they were marched to Winchester.

Bickford *had* done better. Being but one, he eluded the enemy and reached Winchester in safety. When he realized his escape, he was being congratulated in the Harpers Ferry office by operators G. T. Lawrence and J. D. Tyler.

Now let us go back again.

Henry C. Buell was operator at Strasburg. Banks was there with his force, having retired thereto when he heard Fremont's troops were retreating before the Confederates. Banks was not expecting Jackson till he heard of Kenley's being engaged, when he in vain strove to help him. He had re-inforced McDowell with Shields' division—R. R. McCaine, operator, accompanying it. The Federal force, to beat off Jackson, was

not fully seven thousand. Banks resolved to retire, and sent back his trains. The cavalry struck them, but the force was small and the Union troops drove it off. The enemy increasing, the rear guard was cut off; but a part of it joined Banks by another road, at Winchester, and the rest reached the Potomac. Buell, the operator, had been cut off and captured.

This was becoming a *field* day for telegraphers. Jackson pushed hard. He was ambitious to destroy Banks' army. From Winchester to Harpers Ferry the line was intact. Drummond and Armor had been severely tasked for several days and nights, and were exhausted. Messages to and from Banks and others, from and to Washington and elsewhere, were pouring in. It was no time for rest. On the twenty-fourth, Banks telegraphed to Washington the condition of affairs. It was his messages that raised the official pulse to fever heat. Then Stanton telegraphed to the Governors, and they to their subordinates. Lincoln countermanded McDowell's orders, and directed pursuit of Jackson, which, as we have seen, proved a "crushing blow" to McDowell's hopes. The tide of telegraphic orders ebbed and flowed throughout the Federal States To illustrate nautically, it was a Nova Scotian tide. Fremont, as we have seen, was brought up from the mountain fastnesses.

While these things were progressing, Jackson was hurrying up his army. Eight hours the Nationals remained in Winchester. Three of them they rested, and five they fought. Further resistance was madness, and so Banks fell back again; his trains, having kept on, were nearly safe. Drummond, all this time, was in his office. The troops fell back through the town, Armor among the last, but making good time. Pursuit is almost always vigorous at first; so it was here. Firing was now heard in the village itself. Near an hour after the retreat had begun, Drummond sent an orderly to see if his horse was ready to mount. It was. He then sent all his orderlies to join their regiment. The rebel yell was coming in at the window. It was more ominous than the musketry that was cracking, nearer and nearer. Drummond was going. His hand was on his instrument; his dispatches were on his person. A moment more, and he would be off. That instant an orderly rushed in, out of breath, and handed him a telegram for Harpers Ferry,

about reinforcements. With one hand Drummond called Harpers Ferry office, and with the other burned his dispatches.

It so happened that at that particular moment Harpers Ferry operator was busy on the Washington line, and did not hear, or hearing, did not suspect the consequences of a few seconds' delay, and no response came—nothing but that portentous yell. Drummond now started to tie his horse at the door, when he would return and send the message. Some frightened soldier had mounted the horse and disappeared; the Confederates were within a few hundred yards. Rushing back, he called "H. F." a few times, and seizing his instrument, he hurried to the street. The nearest Union soldier was fifty yards in advance, on a double quick, dropping *impedimenta*, and the Confederates very close and firing down the street. Drummond thought if he could cross the street and take one at right angles, he could escape; and running across their fire, he reached the street safely, but was in the very jaws of the Confederate cavalry, having only time to destroy his instrument on the stone pavement. Bickford had reported and volunteered to help, but Drummond, knowing his time was short, persuaded Bickford to leave. Drummond was reported by the press as killed, a soldier having stated that he saw him fall.

Banks' army and train safely reached Harpers Ferry.

Fremont took a route leading him into Strasburg from the northerly side, instead of taking the direction ordered and coming up from Harrisonburg. Shields' division, the advance of McDowell's forces, entered Front Royal, ten miles east, when Fremont struck Strasburg. When Fremont's advance went into Strasburg, Jackson's rear guard went out. Then came the battles of Woodstock, Cross Keys, Port Republic, and the escape over, and burning of the bridge spanning the Shenandoah. Pursuit ceased, and next we hear Jackson and Ewell and Johnson aiding the Hills and Johnston, at Mechanicsville and Gaines' Mills.

Experience of Captured Operators.

Drummond's experiences in a new field are told as follows:

On the 31st of May, we were ordered to report at provost marshal's at 10:30 A.M. Started on march at 12:30. Marched fifteen

miles, and halted for the night in the middle of the road. Sentinels would not allow us into a field close by; we were, consequently, compelled to lie down in the mud, so deep that Lieutenant Rice, of the Fifth Connecticut, with whom I slept, could not see a particle of his blanket when we got up, and so left it there; and I can safely say he regretted leaving it for months after. It rained very heavily all night, and as we had no rations all day and night, we arose from our soft bed soaking wet, cold, hungry and very miserable generally. The next day, Sunday, we marched, at five A.M., for Strasburg. Here the officers got breakfast at hotels, for which they paid. Halted at four P.M., eleven miles from Strasburg, and prospects were held out that we would get half rations, uncooked; which eventually proved true, as we were the recipients of four crackers (hard-tack) each. *Monday*, *June* 2, marched fifteen miles, camped at Mount Jackson, in hospital; nothing to eat all day.

June 3.—Marched sixteen miles. Officers camped in a dirty barn. No rations; oppressively warm. After we were all lying down, terribly tired and hungry, not a sound to be heard, I sang as loudly as I could the song, "Bacon and Greens," which praises these articles of food in a very tempting manner. One verse goes:

> Oh! there's charm in this dish, rightly taken,
> That from custards and jellies an epicure weans.
> Stick your fork in the fat, wrap your greens round the bacon,
> And you'll vow there's no dish like good bacon and greens.

They let me finish, but immediately after cried, "Put him out!" "Gag him!" etc. We *were* a hungry lot. I'll never forget that night. *June* 4.—Marched seventeen miles to Harrisburg. No rations until night; first regular rations we have had. All commissioned officers paroled to report at Staunton. Telegraphers refused, becaused not commissioned. *Fifth.*—Marched twenty-one miles, over horribly muddy roads, last ten miles without any halt to rest. Feet very badly blistered. No rations. *Sixth.*—Marched twelve miles; arrived at Waynesborough 12:30, noon. No rations; feet very sore. Camped in a field near depot. Rained some during night. Bought provisions; no rations. *Seventh.*—Rained very fast all morning. Drenched and miserable. Sun came out after noon. Went to town with guard; bought shoes, towels and soap. Washed in river, put up tent, received rations and slept well. *Eighth.*—Beautiful day. No rations. Wagons packing, and appearance of moving. Charley Moore very ill. Marched at

four P.M. Camped six miles from Waynesborough. Slept in clover field. No rations. *Ninth.*—Marched at ten. Rations of fat pork; no bread. Halted at North Garden Station, after marching sixteen miles. Camped in field. Baked some bread (flour and water). *Tenth.*—Got up at four. Raining heavily all day. Field very muddy. Changed our quarters, in midst of heavy rain, to a worse place. Passed a miserable night.

June 11.—Left in box cars this morning. Hustled into a box with about sixty others, like cattle. Very close and warm. Arrived at Lynchburg five P. M. Marched to fair grounds, where rations were served out. *Sixteenth.*—Buell very sick; not extra well myself. *Seventeenth.*—Very bad with diarrhœa. Only allowed half rations of water; something wrong with well. No rations of food. *Nineteenth.*—Two prisoners died last night; great many sick. No better myself; slept badly. Raining. *Twentieth.*—Very ill. All prisoners called out to be counted. *Twenty-first.*—Colonel Gibbs gave us parole of the grounds. Much better quarters, and separated from soldiers. Rigged up a sleeping place with boards, in cattle sheds. Bought seventeen dollars worth of something to eat. *Twenty-second.*—Much better in health this morning. Think we will all get well again. Best sleep of any night since left Winchester. *Twenty-seventh.*—Buell still sick. *Twenty-eighth.*—Rained very heavily. Our shanty keeps tolerably dry; quite an improvement on the field. *Thirtieth.*—Reported General Winder will be here to-morrow to parole us. *July* 1.—No General Winder. *Fourth.*—Had good dance to-night; flute music. Slept finely after the unusual exercise. *Fifth.*—Changed ten dollars, gold, for one-third Confederate, two-thirds Federal paper, fifteen dollars. *Seventh.*—Our mess all cut each other's hair, close to the scalp. Very warm. *Fourteenth.*—Moore, Lamb, Clark, Burr and I dug for two hours, this P.M., at a trench. After which, officers of guard sent escort with us to stream, where we had a splendid wash, which we enjoyed immensely, and feel much better. *Eighteenth.*—Jumping match this morning. Charley Moore beat us all. *Nineteenth.*—Exercised a little on horizontal bar. All in excellent health.

July 22d.—Prisoner shot before daylight this morning, for walking past sentry. Supposed by his comrades to have been walking in his sleep. *Twenty-ninth.*—Five men escaped last night. *Thirtieth.*—Colonel threatens to send us back with soldiers if we

aid them to escape. *August* 1.—Another telegraph prisoner arrived to-day—M. H. Kerner. *Fourth.*—Burr very sick; fever and chills, particularly chills. *Sixth.*—Joyful news in camp to-day. The Colonel has announced that orders have come for our exchange. Charley Moore fainted twice to-day. *Seventh.*—Confederate officers tell us that we will be on our way home to-morrow or next day. More dancing. *Eighth.*—About two thousand prisoners left for home to-day. We expect to leave to-morrow. *Ninth.*—Got orders to-night to cook rations and prepare to march at six A.M., to-morrow. *Tenth.*—Marched for cars at seven. Left at 10:30. Sun was so intensely hot, could not possibly have walked one hundred yards farther than depot. *Eleventh.*—Arrived at Belle Island this A.M., at six. On the road, six of us crawled through the windows of the car to the roof, and there slept. It was wonderful we did not roll off, but we could not endure the heat and bad odor inside. Left for Richmond at one P.M. Reached Libby Prison about three; where we were informed we could not be released until we could procure an exchange for ourselves. Imagine our feelings! *Twelfth.*—Officers in next room all leaving for home to-day. Spoke to Lieutenant Selfridge through hole in floor. *Thirteenth.*—Saw all officers from Salisbury through hole in door. Spoke to Captain Betts, Lieutenant Rice and several others. *Fourteenth*—Spoke to John C. Gregg (M. T. corps, who was taken at Acquia Creek, about six months ago) through hole in door. *Seventeenth.*—Gregg left for home this morning with officers. No sign of our going yet. *Eighteenth.*—There are now one hundred and fifty prisoners in this room. *Nineteenth.*—Charley Moore and I made the raise of a sleeping cot. *Twenty-third.*—Hard bread to-night, in consequence of more prisoners arriving this P.M.

August 31.—Rations are always soup (very watery), boiled beef and bread; never change. *September* 5.—Man shot up stairs. The guard on the street are in the habit of amusing themselves by shooting at any prisoner who shows himself at the windows. A man in our room forgot himself, and was quietly looking over the James River. He approached too close to the window, and we heard a shot, and immediately after a fall up stairs. The ball had gone close to the man's head, through the wooden floor above, and killed a sergeant, who was four or five feet from the window. He was sitting on a table, leaning forward, and was struck through the heart; death was instantaneous. The man who did the shooting

was arrested, as a matter of form, but was looking out for a fresh shot next day, and the Richmond papers agreed that he had done his duty, and gave him credit for it. *Twelfth.*—About forty of us volunteered to go to Belle Island and make descriptive lists of about six thousand prisoners. We got at work about three P.M., finished about eight A. M., thirteenth, having worked all night. Five thousand soldiers left to-day. Rumored we are going home in a day or two. *Fourteenth.*—About ten of us were called out this morning, quite unexpectedly; no time except to grab whatever was handy. Through a clerical error, Charley Moore's name was omitted on the list; but we did not forget him. I went to the Captain, and told him it must be an omission, and, fortunately, he was generous enough to look into it, and found the clerk had left off Charley's name. In the meantime, poor Charley thought he was deserted. Left Varina at 4: 30 P.M.; anchored at dark. *Fifteenth.*—Steamed off at daylight; beautiful weather. Arrived at Fortress Monroe about twelve M., and anchored in stream. Weighed anchor six P.M. When we arrived at Annapolis and were turned loose, without guards, we hardly knew how to keep together.

On arriving at War Department, Washington, we were very heartily welcomed, although we were a hard-looking lot, and it was altogether unsafe to come too near us. We got some money, and I got permission for Tommy Armor to accompany me to procure an entire change of wardrobe. I stood in the middle of the floor and directed the purchase from a safe distance; then made for the nearest bath house, rolled all my clothes in a bundle, and threw them out of the back window, for obvious reasons, too numerous to mention. Before leaving Richmond, we were paroled for exchange. I managed to take a copy of the parole, which was as follows: "We, the undersigned, do solemnly swear and pledge our sacred word of honor, that we will not, during the existing war between the United States and the Confederate States of America, bear arms or aid and abet the enemies of said Confederates States, by information or otherwise, unless regularly exchanged or released.—Richmond, September 14, 1862."

West Virginia More Particularly.

The month of May (1862) brought misfortunes, and troubles also, to the telegraphers in West Virginia, where Fremont relieved Rosecrans of command, April 6, 1862, and planned two general movements, one of which has been merely mentioned.

Fremont directed General Cox to advance from Gauley Bridge, *via* Raleigh and Princeton, with one column, himself taking another up the New Creek Valley, intent on striking the Virginia & Tennessee Railroad at Salem, whither he was going *via* Monterey and Warm Springs. Captain David was ordered to extend the telegraph by each route, as the two columns advanced. Indeed, it was expected to build three hundred miles of telegraphs, which would make the great total of seven hundred and twenty-one miles in Fremont's department alone. Unless one has traveled in West Virginia, he can form no adequate idea of the natural difficulties the Telegraph Corps encountered in their building operations there. Add to the sinuous mountain roads, the falling trees, the rock-bottomed ways, making blasting sometimes necessary to effect holes for the setting of poles, and the numerous new obstacles constantly met—a continual menace from the guerrillas, who infested that entire region lying within the Union lines south of the Baltimore and Ohio road, and the sum total of discouragements becomes great indeed. No country ever afforded better facilities for marauding bands. It was sparsely peopled; there were no railroads for counter movements; the telegraph was the only dreaded intelligencer, and hence it was, that every time a movement was contemplated by guerrillas, a forerunner cut the line, and when the band itself struck a telegraph, it was badly destroyed. Many of the citizens conspired to effect the same object by night, and their hiding places were innumerable.

Notwithstanding these things, David reported, May 21, that he had been successful in keeping Fremont's and Cox's columns in telegraphic communication, and that the telegraph had proved equal to all emergencies. This success was the result of much risk. The men who built the lines were civilians, armed, if armed at all, with their own revolvers. Down on the Gauley, they barely escaped with their lives. The very means taken to prevent interference with the telegraph, while it was the best, only intensified the feeling of bitterness against those in charge. Says David in his May report: "I have suffered no little trouble and anxiety of mind over the operations of the infernal guerrillas. They cut our wires every night, so that it requires a continued effort to keep the connection clear. It is, however,

now nearly at an end. General Fremont seizes and holds two or three of the most prominent citizens in the vicinity where the line is cut, as hostages for every inroad."

But there were other troubles. General Milroy, who succeeded General Reynolds in command at Cheat Mountain, held the gaps in that neighborhood, just as Kelley and Lander had along the Alleghanies in the neighborhood of the railroad, only Milroy did not loosen his hold until after the battle of McDowell, thirty-six miles west of Staunton, when he and Schenck, who had hurried to his aid, discovered that they could not decamp too quick. That was May 8, and this is the story of the additional troubles consequent upon Jackson's dash at Fremont's advance into the Shenandoah Valley, where Fremont, as we have seen, was to join Banks and sweep that whole region of the enemy. Former lines had been built by dropping material along the route, but it proved unsatisfactory. Transportation was forwarded to Green Spring Run, to carry all the material required, as the line progressed south. The line from Green Spring Run was thus advanced rapidly. But when Milroy sent back for help, Schenck dumped the telegraph material on the roadside, and seizing the wagons, pushed on. By-and-by he came back; Milroy came too. It was a long, tortuous and precipitous road, but there was an emergency. East of the Shenandoah Mountains, Milroy's advance was checked and put to flight as far as McDowell, where Schenck and Milroy in vain attempted to stay the progress of Jackson, after which they could not give him the right of way too quickly, and agreed that if he wanted those barren mountains they would confess ejectment and suffer disseizin. "Haste makes waste." Jackson was enabled to convert to his own use David's building material, lying by the roadside, consisting of eight tons of telegraph wire and three hundred insulators; also to destroy three miles of line, leading south from Franklin. But Jackson himself soon got in a hurry in the great valley, as we have explained, when he dropped this material, to the great joy of David, who repossessed it. George K. Smith, operating at Moorefield, was captured by Colonel Harness, but owing to the proximity of Union re-inforcements, he was paroled after starting for Richmond.

We left Fuller assistant manager with General Rosecrans at

Camp Tompkins, near Gauley Bridge, and have noticed his principal operations. In December, 1861, Mr. Fuller was sent to Kentucky, where, as we shall see, he performed good service. On Fuller's leaving, David took entire charge of the telegraphs in West Virginia. W. H. Nash was his chief assistant in the neighborhood of the Gauley, and C. H. Johns was operator at General Cox's head-quarters. Cox became so attached to Johns that when the general went into winter quarters at Marietta, Ohio, in December, 1862, he insisted on Johns accompanying him for cipher duty only, but the necessities of the service prevented it.

When Fremont came, Rosecrans' head-quarters were at Wheeling. Military operations on the Gauley were quiet until the spring of 1862, but all the lines erected were maintained and operated. When, under orders from Fremont, Cox advanced to the Big Sewell, the telegraph followed him. But one fight of consequence occurred, and that was at Lewisburg, when General Heth attacked Federal General Crook, of Cox's command. Heth ran off before Crook had fairly begun to fight. This occurred the same day that Jackson's forces captured Colonel Kenley at Front Royal.

The authorities ordered Cox's troops east, which necessitated his falling back, although the telegraph was constructed to Princeton *via* Fayette and Raleigh. Milroy was also ordered to join the army in front of Washington, and Fremont's extensive plans of operations against the Confederates entirely failed. The misfortunes on the Peninsula were felt every where, and one of the consequences thereof was the abandonment of much of the country and telegraph south of the Baltimore & Ohio Railroad. Thus the line from Green Spring Run to Franklin, eighty-seven miles, Grafton to Phillippi, fifteen miles, Point Pleasant to Raleigh, two hundred miles, Piedmont to Lona Coning, seven miles, and Rowelsburg to Cheat Mountain, aggregating three hundred and seventeen miles, were reported in October (1862) semi-annual report as abandoned. When David was commissioned captain and assistant quarter-master (in July), he was ordered to St. Louis to examine and report on telegraphic operations in Missouri, whither he went, leaving Charles O. Rowe in temporary charge of the department.

The following named operators served in West Virginia a part or all of the first six months of 1862: R. M. Shurr, W. F. Allen, J. B. Pierce, Charles O. Rowe, C. C. Starling, G. Townsend, Alf. Winder, F. N. Benson, G. H. Curtiss, M. H. Kerner, J. S. Keith, Isaiah D. Maize, W. H. Nash, C. Wolf, P. A. Stidham, Charles J. Thomas, R. A. Furr, M. Gordon, E. Rosewater, George D. Sheldon, L. B. Dennis, W. T. Lindley, Thomas M. Sampson, James W. Vermillion, W. H. H. Lancaster, C. D. Tull, G. K. Smith, N. De Bree and F. M. Ingram.

CHAPTER VII.

THE TELEGRAPH IN THE SOUTH-WEST.—FORT DONELSON.—PEA RIDGE.—ISLAND NO. 10.—MEMPHIS.

The great Middle and Western States, while responding generously to calls for troops for Virginia, patriotically fitted out great armies to beat back the Confederate hosts, long gathering in the South-west and border slave States. The South was bent on compelling Missouri and Kentucky to enter the Confederacy, and if unable to carry the war into the border free States, aimed at least to force it upon the territory of the lukewarm slave ones. Zollicoffer's army, near Barboursville, in South-west Kentucky, Buckner's, on the line of the Louisville & Nashville Railroad, near Bowling Green, and General Polk's at Columbus, Kentucky, on the Mississippi, constituted the principal rallying forces of the Confederates in Kentucky, when we last noticed them. Confronting these were, as we have seen, Buell's forces, under Thomas at Camp Dick Robinson, and under Mitchell at Muldraugh's Hill, besides Grant's troops at Paducah and Cairo. The Cumberland was sealed against the Union by the batteries and works at Dover, called Fort Donelson, just over the Kentucky line, in Tennessee, and the Tennessee by Fort Henry, just across the peninsula from Fort Donelson. Thus, were the great artificial and natural highways leading south, entirely blockaded, and the problem was first, where, and second, how, to attack and clear away those obstructions.

In Missouri, we last saw the main Union army, under Hunter, making an ignominious retrograde movement from Springfield. His appointment was probably a temporary one, as he was relieved a few days thereafter (Nov. 18, 1861), by General H. W. Halleck, and given a department further west, which included Kansas.

Leaving operations under Buell for the succeeding chapter, we will now examine those in Halleck's department. The enemy,

under General Price, possessing the territory abandoned by Hunter, west of Rolla and as far north as the Osage River, gave Hunter's movement every outward appearance of a retreat. Recruiting for the rebel army was active in nearly all parts of the State, but carried on stealthily east of Rolla, in the south-west, where Sigel was in command; of Sedalia, in the center, where Pope was sent by Halleck, and in Prentiss' district, late Pope's, *i. e.*, North Missouri. This resulted in numerous semi-organized bands, some of which joined Price, while others continued in their maraudings until destroyed or dispersed by the Federals. The affairs at Millford, December 18, 1861, where Pope captured over thirteen hundred prisoners; Mount Zion, in Prentiss' district, December 28, where five or six hundred Confederates were dispersed, and Silver Creek, January 8, where Major Torrence badly punished and dissipated another rebel force, were some of the fruits of Halleck's administration. But such operations, while they necessarily occur in all great wars, exert but little influence on the final result.

It will, however, from this statement, be readily understood that the telegraph lines to Sedalia, Rolla, Ironton, the newly constructed line from Cape Girardeau to New Madrid, and those in North Missouri, were special objects for destruction, and consequently were cut repeatedly. The system adopted by George H. Smith, of having mounted repairers at offices, and at near intervals, with directions to ride their circuits daily, resulted generally in the re-establishment of communication in a few hours at most, after the wires were severed. This kind of "riding the circuit" was very hazardous, and some of the repairers lost their lives—being shot by concealed bushwhackers. We will, at the proper time, mention instances where it occurred. Suffice it now to state a well-founded belief, grounded upon experience and observation, that the man who always responds promptly to a call to repair a broken line in a guerrilla-infested region, without escort, evinces a degree of courage rarely required in actual battle. There were many such men engaged in the repair service of the U. S. Military Telegraph Corps. They were found in every department. Usually illiterate, they were none the less sensible of their dangers; nor were they tardy about taking their desperate chances. If one was killed, another

took his place, and, being a mere civilian, no notice was taken of his fate by the Government, in whose service he died. No provision was ever made for his wife and little ones; no slab ever erected at Government expense; no military salute was fired over his grave. If the corps in his district, from motives of sympathy, made up a purse out of their hard earnings, and mention of the fate was made by the officers in their annual reports, that was the most that could be expected. But what became of those reports? Those for 1864 and 1865 were printed along with the Quarter-master General's; but none other ever saw the light of day, and astute historians have even overlooked those that were printed. Indeed, some who pretended to write up the history of the civil war, seem to have been strangely ignorant of the fact that there ever was a Military Telegraph Corps; much less did they ever hear of the repairer who dared and died for his country.

On the North Missouri Railroad, the line had been completed by Smith's party to Hudson, where it tapped the Hannibal & St. Joseph, when General Hurlbut raided from Macon through the north part of the State, and, returning, struck the Hannibal & St. Joseph at Shelbina, where J. B. Clarke was operating, and where trains were to meet the General, and convey his force to Macon. The telegraph being down, Clarke proposed to take an engine to Honeywell, while the troops were loading, to see where the line was broken, and if Salt River bridge was intact. After crossing the bridge, he saw a few horsemen near it; but at Honeywell, he found the road destroyed, and about two hundred rebel cavalry about a mile off, coming up at a gallop. Rushing into the telegraph office, Clarke snatched the instruments from the wires, and made good his escape on the engine. But the cavalry overhauled Mr. Dunning, the operator there, and made him hold the commander's horse, while the office was searched for the instruments. Great was the officer's chagrin when Dunning convinced him that Clarke had saved them.

Halleck's department, we have seen, did not at this time include Buell's army. There were two great ends in view—the capture of Nashville, and the opening of the Mississippi River. Admiral Farragut had captured New Orleans (April 25, 1862), and General Butler garrisoned it. Halleck's great aim was to

sever the Confederacy, and co-operate with the fleet and army, then about New Orleans. A direct attack, though never abandoned, was not prosecuted with the vigor of the main operation. The Cumberland and Tennessee Rivers were not so stoutly held as the Mississippi, and it was up these that General Halleck, and Commodore A. H. Foote in command of the river gun-boats, built under his direction about Cairo, agreed first to operate. The fleet of gun-boats and transports ascended the Tennessee River, February 4, 1862, and landed the troops within four miles of Fort Henry; but it was not deemed practicable to build the telegraph beyond Smithland, at the mouth of the Cumberland, until about the time Fort Donelson was taken.

In December, 1861, Solomon Palmer was employed by Colonel Wilson manager of the telegraph in Halleck's department, east of the Mississippi, to take charge of the construction party. If Wilson had never done any thing else during his management, the selection of Palmer would have gone a long way to make it a success; but the next month, he took John C. VanDuzer from his own telegraph company's employ in North Missouri, and made him chief operator of the military lines in his district. These two men could build and operate a military telegraph, if it was in the power of man. Their subsequent career, running through the war, attests Wilson's foresight and their own rare merits for the positions that fell to them.

February 6, Fort Henry was captured by Admiral Foote, so much quicker than General Grant, in command of the land forces, considered possible, that he did not make timely preparations to intercept the retreat of the Confederates, most of whom reinforced those at Fort Donelson. Federal gunboats then went up the Tennessee to Florence, Alabama, nearly two hundred miles, made some captures and returned. General Grant was not long in moving over twenty thousand troops across the peninsula, where he besieged Fort Donelson. Then came a force of ten thousand more up the Cumberland, and Foote's gunboats, and then the battle. Twenty thousand brave men behind works, against thirty thousand in the field. The chances of each would seem about equal. As to the battle, it was simply awful. It is not within the scope of this work to describe battles, except so far as may be necessary to demon-

strate the service of the telegraph. At Donelson, there was no telegraph. The field, which finally stretched from river bank to river bank, was miles long. At a perilous moment, General Grant was not even on that field, but had gone to consult with poor, wounded Foote, on his disabled gunboat. There had been ample time for the erection of field telegraphs, but war was new in America, and the telegraph newer yet, and so regiments fought, hour after hour, against overwhelming numbers, and were finally driven, in some places, to where there were troops enough to beat back the enemy in their turn; a conflict of arms that swayed to and fro, hour after hour, the dead and dying fringing the advance points of contact, and thus marking, by a real dead line, where the tide ebbed, or how far it flowed. That was a tragedy of too many parts.

Before the war closed, I passed many times over this fatal field, and in the woods, almost hidden by growing vegetation, might be seen — not graves, for that imports a better burial — but mounds, indicating where loved sons and fathers had been laid in heaps and covered over. Oh, the sorrow that was spared the wife or mother, who little imagined that such a burial was the usual lot of the heroes who thus died for their country!

The investment fairly began on the 13th of February; then came the strife of the fourteenth and fifteenth; then Floyd and Pillow and Forrest fled by night taking with them many troops, and leaving Buckner in command of over ten thousand more, beside the wounded, not to fight, but to surrender; which he did on the morning of the sixteenth.

At this point, historically speaking, criticisms are in order. It is marvelous how many brilliant generals have been lost to the world in the making up of ready critics. Truly the pen is mightier than the sword. We, too, would be tempted (not irresistibly, however), to explain what Grant should have done, if we had sufficiently described the battle to lay the foundation for censorious remarks. We have played many games of chess, and when our opponent carried off our queen, we saw our error. Doubtless, if Grant were to fight that battle again, he would do better. So would the Confederates act differently. They would evacuate before they were invested.

At this time, there were two parties at work building telegraph toward Donelson; Smith's, from Smithland, and Wilson's, from Fort Henry. The territory was clearly in Manager Wilson's district, but Halleck, who had yet to learn the real status of the military telegraph, ignoring Stager, ordered Smith to aid in the construction of this line. Accordingly, Smith, with W. S. Hewitt, formerly captain of Company B, of the Fremont Telegraph Battalion, and Frank S. Van Valkenburg, as chief assistants, began at Smithland to construct the line to Fort Henry; and Wilson's party, under Van Duzer and Palmer, commenced as stated. When the line was finished to Fort Henry, or nearly so, Stager ordered Smith west of the Mississippi, and on reaching St. Louis, February 25, he was ordered back by Halleck.

Of course, this terminated unpleasantly to some one. Captain Stager then telegraphed General Halleck his authority for controlling the military telegraphs, also the territory assigned to Wilson and Smith, respectively; adding, that if either failed to meet Halleck's wishes, they should be reported. Halleck replied that the Paducah line had not been kept up; that "there must be one good head of the telegraph lines in this department, not two, and that head must be under my immediate control."

Right here it may well be stated that the line from Cairo to Paducah was built on the Illinois side, near the river; that while Grant was about operating against Fort Henry, an extraordinary storm inundated the country, raising the river to an almost unprecedented height: so high, indeed, that Foote's gunboats could pass in safety over the rebel torpedoes, sunk in the Tennessee; so high that the Paducah telegraph line was submerged for miles. Operator Tiffany and a repairer nearly lost their lives, trying to repair it. *Débris*, and breaking and falling trees, nearly destroyed the line. But great movements were under way, and Halleck, at St. Louis, was impatient. He was in communication direct with Cairo, *via* Odin, and wanted Paducah exceedingly, at any cost.

The correspondence continued; Stager insisting that the field was too large for one to do justice to, and urging other potent reasons, and explaining what Halleck must have known—that the river had drowned the telegraph. But Halleck insisted on

LIBRARY OF THE UNIVERSITY

having one head, and having indicated a preference for Smith, he was appointed by Stager, although Smith telegraphed Captain Stager that he did not want that territory. The Secretary of War fully coincided with Captain Stager, but, "on the whole," it was not considered best to continue to oppose Halleck, and so the matter ended. Wilson's retirement proved permanent, and Smith was ordered by General Halleck to "crowd the lines to Nashville, Tennessee, Florence, Alabama, and Memphis, Tennessee." Smith's territory, being co-extensive with Halleck's, was the largest field embodied in any of the departments.

Before we take a final leave of Colonel Wilson, let us note his description. It will be found below, in what he jocosely calls his "death warrant." Such writs were quite usual then.

OFFICE OF PROVOST MARSHAL, ST. LOUIS, MO., Oct. 5, 1861.

Permission is granted to J. J. S. Wilson to pass beyond the limits of the city and county of St. Louis, to go to Springfield.

(Signed) J. MCKINSTRY,
Major U. S. A., Provost Marshal.

On the back of which is:

DESCRIPTION OF PERSON.—Name, J. J. S. Wilson; age, thirty-two; height, five feet, nine; color of eyes, blue; color of hair, light; peculiarities, good drinker. It is understood that the within named and subscriber accepts this pass on his word of honor, that he is, and will be ever, loyal to the United States, and if hereafter found in arms against the Union, or in any way aiding her enemies, the penalty will be death. (Signed) J. J. S. WILSON

February 13, General Nelson left Camp Wickliffe, near New Haven, Ky., with two brigades of Buell's army, to reinforce Grant at Fort Donelson; but failing to reach the fort in time, he proceeded up the river to Nashville, which had fallen. About the time that Nelson passed Smithland going up the river, General Sherman was at Paducah, and exceedingly anxious about his movements. The Colonel commanding at Smithland, like many new officers, had *abundante cautela* on the brain, and imagining that there might be a rebel operator on the line between Paducah and Smithland, very stupidly placed his operator under the guard of two soldiers, to prevent his *talking* over the

wire. Of course he could pretend to be sending a stale message as long as he chose, and yet be only talking. The wood-tick the soldiers had learned, or would, but the telegraph tick was a hopeless jargon. Parker, the operator at Paducah, was duly informed of the state of affairs, and thereupon he prepared an order for Colonel Dave Stewart, the ranking officer, to sign, releasing the Smithland operator. Parker read the order aloud, and as Stewart was about signing it, Sherman, who chanced to be by, said, "What 's that? What 's that?" and looking at it, he said, "No, the Colonel is right. Can 't relieve the guard."

By and by, Sherman went to the office, when the following telegraphic conversation occurred: Parker to Smithland—"Has the steamer Tarascon passed yet?" Smithland—"I 'm under arrest and can't answer you." Parker—"General Sherman wants to know." Smithland—"I don't care if it's Halleck himself. I'm under arrest, and can't talk about such things." Parker—"Sherman asks. Do you know?" Smithland—"Of course, I know." Parker—"Sherman wants to know if General Nelson has passed up." Smithland—"Tell Sherman to send a message then." Parker—"Do you know?" Smithland—"Certainly, I do." Parker—"How far is the colonel's head-quarters?" Smithland—"A mile and a half." Sherman to Parker—"What kind of a fellow is that operator?" Parker—"He seems to be good at obeying orders. It was a foolish thing for the colonel to put soldiers over an operator to keep him from talking by telegraph." Sherman—"Well, that 's so. I didn't think of that." And thereupon Sherman himself wrote the order releasing the operator, and got at once the information that Nelson had passed up.

Major Smith extended the line from Fort Donelson to Clarksville, *via* the Tennessee Ridge, thirty-nine miles, in March, and from Clarksville communication was opened to Nashville direct, and also *via* Bowling Green, Ky. The first operators on this line were, at Smithland, Abe D. Dougherty; at Chaudits, a city of two log houses, owned and inhabited by a Frenchman and his increasing family and many other extremely domestic animals—a city bounded on all sides by a howling wilderness, with an excellent landing a few rods off, where guerrillas were wont

to cross the Tennessee at night—the operator to take to the woods a minute later, when Chaudits' dogs uttered their war-whoop; here, Robert B. Griffin was first stationed. In a month, Peter Fowler relieved him ; but Peter endured it only a month, when J. R. Thompson came, and he, for a month only ; and so it went. Fowler and Thompson, brave fellows that they were, are now numbered with the dead. What a constitution Griffin must have had, to survive the mosquitoes, gallinippers and wood-ticks, the guerrilla maraudings, the melancholy wilderness and the horrible *ennui* of this Frenchman's retreat. At Fungo, say twenty-five miles farther and fifty from Smithland, Thompson operated before going to Chaudits', and when he quit Fungo (how that name rolls like a sweet morsel over one's tongue) there was none so good as to do it reverence, until March, 1863, when R. H. Bliven created a great flutter among the only two damsels in the place, by opening an office there. These offices were purely test stations, to locate breaks in the line, and thereby speedily remedy the mischief. At Fort Henry, Edward Schermerhorn and Alonzo D. Griffin operated; at Fort Donelson, Charles W. Hammond, until relieved in May by J. T. Tiffany ; at Clarkesville, J. W. Purnell, in June, and J. G. Webb, in August. Tiffany became chief operator of this line, from Donelson to Smithland, distance one hundred miles, and as such, it was his duty to travel along his line occasionally, and direct repairs. Once, while out with a repairer named Charles Byers, he was fired upon from the bushes, the bullet passing through the lappel of his overcoat. They at once fired into the brush, and saw traces of blood, but the bushwhacker escaped.

Grant's army moved up the Tennessee River, to Pittsburg Landing, about thirty miles from Corinth, Miss., where we will leave it for a while, and turn our attention again to affairs in Missouri.

We left Price at Osceola, on the Osage, with eight thousand men about him, and more seattered in various portions of the State, recruiting and foraging, if not actually pillaging and devastating. The Hannibal & St. Joseph Railroad suffered greatly, but in the numerous encounters that took place, owing generally to the Federals being in greater numbers, or better

armed and disciplined, these rebel detachments were greatly cut up. The Federals, concentrating at Rolla, under General S. R. Curtis' immediate command, moved, February 11, through Lebanon, against Price ; but he was no match for Curtis, and retired to the Boston Mountains in the north-west corner of Arkansas, where McCulloch's forces joined Price's. General VanDorn had assumed command, owing to the want of cordial concert of action between Price and McCulloch, and their united strength was probably twenty thousand men.

Under Curtis were Colonels Osterhaus', Jeff. C. Davis' and E. A. Carr's commands, and also General Asboth's, aggregating fully ten thousand men. Curtis pushed on a few miles further into Arkansas, until, fearing the increasing force of VanDorn, he commenced retiring. But the enemy, by extraordinary diligence, got in his rear in force (March 6, 1862), and Curtis had either to fight or surrender, which latter, he and his subalterns and soldiers were not well calculated to do.

While he is making dispositions to receive VanDorn at Pea Ridge, let us see what Major Smith had accomplished in this direction with the telegraph. Placing Duncan T. Bacon (who had been on the North Missouri road with General Schofield) in charge of the builders (under H. C. Weller) and operators, south of Rolla, Smith directed him to build the line as far as the army moved. Before it reached Lebanon, an office was open there, where —— Harrison operated. Luke O'Reilly relieved W. H. Woodring, at Rolla, January 31, and the latter took the Lebanon office, where he remained until March 1, when being again relieved by O'Reilly, he proceeded, unguarded, *via* Waynesville, where O. A. A. Gardner was operating, twenty-two miles, to Springfield, through a storm so cold as to compel him to halt, and build fires to keep from freezing. Bacon pushed the line on from Springfield toward Bentonville, two hundred and fifty miles from Rolla, and was within ten miles of the battle-field when the conflict commenced.

The terrible three days' struggle between the contending forces began on the 6th of March ; the heroism displayed on that memorable field was never excelled in battle. Bacon was present, with Curtis, rendering such service as lay in his power; but there was no telegraphic communication with the army, and

no field wire during the battle, in which the Federals lost one thousand, three hundred and fifty-one men killed or wounded. The telegraph soon spread the news of victory. Having followed Van Dorn some distance, Curtis retired to Keytesville, and then to Cassville.

Not long after, Van Dorn and Price, with the most of their forces, joined Beauregard, at Corinth, but not in time for the battle of Shiloh. Curtis determined to take advantage of their absence, and again entered Arkansas, with seven or eight thousand men; but as the guerrillas would jeopardize his communications unless he strung out his force so as to become ineffective at the head, he wisely determined to establish a new base, and, accordingly, marched eastward to Batesville, Arkansas, reaching there May 6. At this place, on the White River, not far from the junction with the Big Black, or some other point farther down, Curtis hoped to supply his army by water, and have a shorter route to his objective, Little Rock, the State capital; but all depended upon the opening of the Mississippi to the mouth of White River — in short, upon the issue at Corinth, where the South-west was concentrating.

In furtherance of this plan, the telegraph superintendent in Halleck's department was ordered to construct a line from Pilot Knob, Missouri, to Batesville, Arkansas, two hundred and one miles. This line was completed by way of Greenville, Missouri, Pitmans Ferry and Pocahontas, Arkansas, early in June, and was operated at Batesville by Luke O'Reilly and H. B. Kunkle; at Pocahontas, by Jno. H. Byrne and James L. Quate; at Pitmans Ferry, by Charles Payne and Geo. A. Purdy; at Greenville, by Geo. J. Talmadge and P. B. Frazier, and at Pilot Knob, by Theodore Holt and assistant. All of these offices, except those at Curtis's head-quarters and Pilot Knob, were located in sparsely settled regions, and continually beset by guerrillas, rendering the operators' and repairers' positions exceedingly perilous. On the 30th of June, a party of guerrillas entered Pitmans Ferry and captured Purdy and the telegraph property, carrying Purdy off with them. James L. Quate, at Pocahontas, was equally unfortunate.

It was Curtis's expectation to meet assistance on the White River and march across the country to Little Rock, in which

event, the telegraph was to be extended to that city. In less than a month after camping at Batesville, Corinth having fallen, Curtis took Luke O'Reilly as cipher operator, and following the river, advanced to Clarendon, where he had reason to expect to meet Federal gunboats, under Commander Fitch, and troops known to have started up the White. But on reaching Clarendon, he learned of the return of the expedition the day previous. Fatigued and disheartened, knowing scarce whither to turn, in a country quite uninviting and unproductive, and harassed by well-mounted parties, he determined to make his way to Helena, on the Mississippi, which place he reached, after routing fifteen hundred Texan horse, under Colonel Rust; and so Little Rock was saved to the Confederates, and Southern and South-western Missouri again opened to the forays of predatory banditti, who were not slow in harassing the country. Thus Purdy and Quate were captured within a week after Curtis's departure. The immediate abandonment of this line, south of Greenville, became necessary

---

Owing to the successes of the Federals on the Tennessee and Cumberland rivers, Columbus, Kentucky, which General Polk had strongly fortified, was rendered untenable, and its garrison greatly reduced. Early in March, Commodore Foote, with six gunboats, and General W. T. Sherman, with several thousand troops on transports, moved down the river to capture the place, but found a Federal cavalry force from Paducah already in possession, the enemy having fled.

It is related that Confederate General Polk having, by strict orders, excluded intoxicating liquors from Columbus, the operators there arranged with Emmet Howard, of the Hickman office, to send them, occasionally, a demijohn of Woodford County's best, labelled "Nitric acid," which label was an excellent passport. This ruse, however, at last failed, and Howard was delegated to see the commandant of the post, Colonel Wickliffe, and represent the want of nitric acid for their Grove battery, and ask an order for three gallons of the best Bourbon in the hospital, to use in lieu of acid. Wickliffe and Howard were quite intimate. The latter prepared the order, and hur-

riedly stated the necessities of the service; but whether Wickliffe feigned ignorance or not, it mattered little, as the order was signed. Wickliffe's acid was a standing joke for some time.

After the evacuation of Columbus, Hickman was virtually held by couriers, who, in case the telegraph was cut, were to notify Polk, at Jackson, by telegraph from Union City, of the passage of gunboats for Island Number Ten. One foggy morning, the gunboats appeared at the wharf near the office, so unexpectedly that Howard had barely time to seize his instrument and with a leap, as for dear life, reach the pavement, where a courier, with an extra horse, was posted. Riding hastily to the depot, they sprang upon a hand car, well manned, and proceeded rapidly for two miles, when, in a deep cut on a curve, the party was nearly paralyzed with terror at sight of an engine, rushing upon them. They jumped from the car, landing in all directions and positions on either side, as the engine demolished the car and threw off the wreck. Mounting the engine, they proceeded for Union City, until near a point within easy range of the gunboats, should any be on the river opposite, where, out of caution, they stopped to reconnoitre. While so doing, they met William McCleskey, operator, who was also fleeing. On the engine were Merritt Harris, C. S., operator, superintendent Culverhouse, and Conductor Gardner. McCleskey reported five thousand cavalry on the highway, but he was too nervous to be good authority. Harris and Howard, however, at some distance from the engine, discovered the Federals, and Howard, by his masterly effort to reach the engine, was too exhausted to climb up unaided. As he sank on the floor of the tender, a volley from the Federals was heard. The engineer opened the throttle, but the locomotive stirred not; capture seemed inevitable; the driving rods were on a dead center, and the machine would not move; but, from courage or desperation, or both, the engineer sprang to the ground, and with his crowbar moved the driving wheel, when the engine, trembling like a thing of life, distanced the pursuers as if itself was fleeing from fiends incarnate. It is said that seven miles were traveled in five minutes.

Bridges were burned, and no more Confederate trains passed north of Union City; but Howard was ordered back to within half a mile of Hickman, where, with a cross-tie for an office, he

maintained communication with General Polk several days, when he was relieved by operators Harris and Johnston. Harris, subsequently, barely escaped, and Johnston was captured while concealed in the house of a friend, but made his escape the same night, and, after getting lost in the swamps, reached Humboldt, Tenn., exhausted. Harris, a brave, noble and generous fellow, died in Texas during the war, beyond the reach of friends, and in a strange land.

At the same time that Curtis was wending his way toward the Ozark Mountains, in North-west Arkansas, Grant's troops, under C. F. Smith, embarking for Pittsburg Landing, Mitchell's about moving on Huntsville, Ala., Buell's on Savannah, Tenn., and Com. Foote and Colonel Ellet, at Cairo, were refitting gun-boats and building rams, General John Pope was busy collecting forty thousand troops, with which to overcome the Confederates, who, at the strongholds of New Madrid, Mo., and Island No. Ten blockaded the Mississippi River and defended Memphis.

In anticipation of Pope's operations in this direction, Major Smith built a telegraph line from Pilot Knob, through Fredericktown to Cape Girardeau; thence to Commerce, Mo., and, as Pope advanced therefrom, it was extended by way of Benton and Sikeston, under the immediate direction of F. S. VanValkenburg, to New Madrid, one hundred and fifty miles by line from Pilot Knob. A cable was laid from Cairo to Birds Point, by Smith, in March, which was connected with a line along the railroad by way of Charleston to Sikeston, where, by means of a Hicks repeater, it became a virtual part of the main stem. This gave Halleck, at St. Louis, two circuits to Sikeston, one by way of Pilot Knob, and the other through Illinois.

Pope invested New Madrid on the 3d of March, and pushed his operations with remarkable energy and boldness. In thirty-six hours after telegraphing Cairo for siege guns, they were hurling their ponderous missiles against the enemy's works. Aided efficiently by the gun-boats, New Madrid and No. Ten were surrendered, as indicated by the following papers, the last of which is believed to be in the hand-writing of Thomas A. Scott, Assistant Secretary of War, then with General Pope:

HEAD-QUARTERS, DISTRICT MISSISSIPPI.
New Madrid, April 10, 1862.

GENERAL ORDER, No. 30.

The following dispatch from Major General Halleck, commanding this department, has been received, and, with this order, will be published at the head of every regiment and detachment of this command.

ST. LOUIS, April 8, 1862.

MAJOR GENERAL POPE :

I congratulate you and your command on your splendid achievement. It excels in boldness and brilliancy all other operations of the war. It will be memorable in military history, and will be admired by future generations. You deserve well of your country.

H. W. HALLECK, *Maj. Gen. Comdg.*

The General Commanding has little to add to this dispatch. The conduct of the troops* was splendid throughout. To such an army nothing is impossible, and the General Commanding hopes yet to give them an opportunity to win the glory which they are so capable of achieving. The regiments and battalions of this command will inscribe on their flags "*New Madrid*" and *Island Ten.*"

JOHN POPE, *Maj. Gen. Comdg.*

FOR THE ASSOCIATED PRESS AGENT, Cairo :

NEW MADRID, April 11, 1862.

The following general order was read at the head of every command in General Pope's army, last evening, and created the wildest enthusiasm. All are ready to stand by their commander in any enterprise that may be necessary for the good cause. It is a noble army, and, if they can have an opportunity, their action will be all that could be desired by the most ardent patriot.

(Operator here insert Order No. 30.)

Nearly all the troops that crossed the Mississippi have returned to New Madrid. The number of prisoners will exceed the statement of General Pope. They continue to come into camp in lots of five to fifty, and the whole number will probably exceed seven thousand —over six thousand five hundred being now enrolled. It is, therefore, certain that but few, if any of General McCall's army escaped. Yesterday, two splendid batteries of light artillery (rifled guns) were found in the woods, and a great amount of valuable property

*First five words inserted by the author, as beginning of the sentence is destroyed in the original.

is being found by our troops, consisting of horses, mules, wagons, arms, etc., etc. This movement has certainly been the most complete and successful one of the war—every thing captured, and not a man lost by our forces.

Forts Pillow and Randolph, between Memphis and Island No. Ten, were soon after evacuated, and, June 6, Memphis surrendered to the navy.

The operators on these south-east Missouri lines, pending Pope's operations, or a part of them were, at Pilot Knob, James H. Douglass and Theo. Holt; Fredericktown, Z. P. Hotchkiss; Cape Girardeau, J. R. Dunlap; Commerce, W. W. Livergood (April); Benton, Simon T. Yonkers; Sikeston, Jno. J. Egan, J. R. Thompson; Pope's Head-quarters, F. S. VanValkenburg, Wm. Spinner and A. S. Hawkins; Birds Point, Livergood (March) and Thompson (April); Cairo, W. H. Bromell, G. A. Burnett, G. Burnapp chief operator, H. W. Nichols, James K. Parsons and Geo. Stillman.

That part ot the line connecting Pilot Knob with Sikeston was through a region much infested by guerrillas, and the operators in some of the places received little or no protection. August 16, S. D. Howard, operator at Charleston, reported at Cairo office, that at eleven o'clock the night previous, he was surprised in his office by a party of forty guerrillas, who wrenched out his instruments, demolished his office and came near capturing him; but he effected his escape through a back window, uninjured, although he was fired at and badly frightened.

In anticipation of the capture of Memphis, Duncan T. Bacon was sent there, to aid in opening communication in West Tennessee, and reached the city the first evening of its occupation. While Fitch's gunboats were going up the White River, to meet Curtis, who had left Batesville as we have seen, messages reporting progress were frequently brought from them to Bacon, by couriers, for transmission in cipher to Halleck, who was then at Corinth—the lines having been repaired to that place, as will soon appear. General Hovey, at Memphis, claimed the right to copies of these overland messages; but Bacon refused them, and was ordered under arrest. The New York *Tribune* correspondent, A. D. Richardson, then in that city, wrote up the affair, thus:

On Wednesday, General A. P. Hovey, commanding this post, ordered D. T. Bacon, Esq., Manager of the Military Telegraph, to furnish him copies of official dispatches from General Halleck to General Curtis and Colonel Fitch. General Hovey's motives were, doubtless, good—to keep himself advised of every thing affecting his post, directly or indirectly; but Mr. Bacon knew his duties too well to commit so gross a breach of official duty required of him. He respectfully declined to obey the order. General Hovey directed his arrest, but Mr. Bacon was absent from the office when the orderly arrived, and one of his associates, Mr. VanValkenburg, was arrested instead. The case was laid before General Halleck, by Mr. Bacon, when "Old Brains" promptly replied: "Release the operator at once. He did perfectly right in disobeying your orders."

CHAPTER VIII.

THE TELEGRAPH IN KENTUCKY, TENNESSEE AND NORTHERN ALABAMA.—MILL SPRINGS.—CUMBERLAND GAP.—MORGAN'S RAIDS IN KENTUCKY.—SHILOH.

Having located Grant's army at Pittsburg Landing, in the center, and Pope's at Island Number Ten on the right, let us now look to the left, Buell's army, so long neglected. For, in time, these three commands united before Corinth, under Halleck's personal direction, to meet a like concentration of the Confederates, under Polk, from Columbus, their left, and Johnston, from Kentucky, their right.

How well General G. H. Thomas, commanding at Camp Dick Robinson, succeeded in organizing the nucleus of the army of the Cumberland, may be gathered from the events that occurred a few months after. General George B. Crittenden superseded Zollicoffer, and, hoping to beat the Federals in detail, rather than risk all on a general engagement likely soon to occur, he, with ten regiments of infantry, six cannon and some cavalry, crossed the Cumberland, and advanced to surprise a few Federal regiments. But no surprise occurred, and General Thomas, having also advanced, met Crittenden January 19, 1862, when what is known as the battle of Mill Springs took place. The Federal force engaged was six regiments, one battery and a part of Wolford's cavalry regiment. Zollicoffer was slain, and the Confederates, driven across the river, fled to the Cumberland Mountains.

A few days before this occurred, Colonel James A. Garfield, commanding a small brigade, drove the Confederates, numbering about twenty-five hundred, under General Humphrey Marshall, out of South-eastern Kentucky.

In anticipation of General Thomas's operations, William G. Fuller was called from West Virginia to superintend the building and operating of the United States Military Telegraph south

and south-east of Lebanon, Kentucky, leaving Samuel Bruch to attend to the telegraphic requirements of General Buell's main army, also about to advance. Fuller reported to Buell, December 20, 1861, and was immediately sent to Lebanon, Kentucky, to organize and await orders. He could not get men enough there to constitute a gang of builders, and was obliged to send to Ohio for them. Among those responding was William L. Tidd, his foreman, a most conscientious and capable man, who, in the sad course of events, as we shall see, lost his life in the telegraph service. Horses (except condemned ones) could not be obtained, but Tidd, without the use of a whip, broke twelve wild mules into the traces, with the best results. General Thomas arrived, and ordered a line to Danville. This was completed January 4, and from there, *via* Stanford, it was built to Somerset, seventy miles from Lebanon. The storms, bad roads and blockading army wagons, made Fuller's progress slow. His wagon wheels sank to the hubs, and it was often necessary to corduroy the road. The day that "Mill Springs," sometimes called "Logan's Cross Roads," was fought, the line was completed as far as ordered, *viz.*, to Somerset. The following are the first two messages ever sent concerning that Federal victory, the news of which so electrified the people of the North, especially in the Western States:

BATTLE-FIELD NEAR LOGAN'S CROSS ROADS, KY.,
January 19.

TO BRIG. GEN. BUELL., Louisville, Ky.:

The enemy attacked us early this morning, and were repulsed; Zollicoffer and Bailie Peyton killed. I write this in the saddle.

(Signed) G. H. THOMAS.
Brig. Genl.

SOMERSET, KY., Jan. 19, 3:30 P.M.

TO CAPT. FRY, A. A. G., Chief of Staff, Louisville, Ky.:

The following just received:

BATTLE-FIELD, Jan. 19, 1862.

TO BRIG. GENL. SCHOEPF:

We are on the way to Mill Springs, driving the enemy into his intrenchments. He attacked us this morning about six o'clock, fought well, but was repulsed in a handsome manner by our troops, and is now in full retreat. Zollicoffer and Bailie Peyton killed, and a large number of men. We have

captured four ammunition wagons, with contents, and one piece of cannon. Join us by Hudson or the Salt Works. Do not order in the companies working on the roads. G. H. THOMAS, *Brig. Gen.*

T. S. EVERETT,
Capt. A. A. G.

This line was first operated by William H. Drake at Lebanon, D. E. Martyn at Danville, James Meagher at Stanford, and A. Ellison and R. Brown at Somerset. Brown was relieved by Philip Bruner.

As soon as the foregoing telegrams were received, Buell directed this one to Fuller:

LOUISVILLE, Jan. 19, 1862.

To W. G. FULLER, Supt. Telegraphs, Somerset, Ky.:

Return with all possible haste to Lebanon, Ky., and push the wire south from that place. (Signed) J. B. FRY,
A. A. G. and Chief of Staff.

From Lebanon south, every thing went well until the morning of the thirty-first, when the party was thirteen miles out, on the Columbia road. The builders were started early, and the camp party directed to proceed at eleven, with the wagons, and feed the builders in passing to the next camp. Fuller, leaving his navy revolvers, new boots, fur cape, gloves and a fine field glass with the wagons, went to Lebanon to get money for the men. The line had been completed four miles ahead of the camp on the thirtieth, and the builders were fully five miles away when, about nine A. M., Captain John H. Morgan, with ten men, including his nephew, Samuel Morgan, pounced upon the camp, capturing William C. Olney, A. Wells, Sylvester W. Bartlett, George McCadden and a hired slave; also nine horses, the wagons and all the baggage of the builders. Morgan himself appropriated Fuller's articles and a field telegraph instrument. A citizen coming up was dismounted and put into the Pleasant Hill church, near by, which, with all of Fuller's equipments not carried off, was fired, and then the band decamped. Two companies of the First Ohio Cavalry pursued them for two days without success, Morgan having reached the south bank of the Green River as the Ohioans came up to the north side. He carried off some fifty stolen horses and twenty citizens. Fuller

personally lost one hundred and ninety dollars worth, and the twenty-four builders, all but the clothes they had on. Doubtless the citizen in the church escaped. The camp party was released at Murfeesboro, Tennessee. No further mishap occurred during the building of this line to Jamestown (February 10), on the Cumberland (seventy-five miles from Lebanon), where Colonel — afterward General, and then Governor — Bramlette was in command, except that Fuller's party was shot at several times by guerrillas.

In consequence of failure to send Fuller a telegraph instrument, he was unable to open the Columbia office as soon as the line reached there. General J. T. Boyle, in command there, was greatly provoked at this, and threatened to shoot Fuller; but that expert telegrapher, to Boyle's astonishment, sent his important messages by using the wire ends as a key and his tongue as a sounder, whereupon Boyle, patting Fuller on the back, said he was too useful to be shot yet. To the uninitiated it may be well here to explain, that the telegraph wire is charged by a battery at one or both ends of a line. Both ends are conducted to the ground, which serves the purpose of a return wire. This ground connection must be made or there will be no perceptible current, and so, when the line is severed, there is no noticeable current on either side of the break. The main line, for convenience of manipulating, is run to a telegraph key, to open which is the same as cutting the line. Fuller held the ground end in one hand and the main line end in the other; every time he touched them the circuit became complete, and was indicated on the instrument at Lebanon precisely as if the circuit was opened and closed by a telegraph key. There was hence no difficulty in sending the message, but to know that it was received was more troublesome. Everybody knows what it is to be shocked by a battery. Telegraph characters, we have said, are composed of dots, spaces and dashes, which are ordinarily read by the ear; but Fuller, having no instrument, could only determine them by electric shocks; *i. e.*, a long shock would indicate a t, longer yet an l, and yet longer a cipher; a succession of quick ones meant i, s, h, p, and others, with an intermission of time, e, c, r, o, and yet others, by quick and lengthened shocks, as in f, b, q, etc. It was by such shocks that Fuller received an

acknowledgment of the message on his tongue, which being moist, is, perhaps, the most sensitive part. While such occurrences are rare, some are too well authenticated to admit of any question.

Four days after Morgan fell upon Fuller's party, the author, then a boy of sixteen years, rode over that same way with Fuller, *en route* for his first military telegraph office. Stopping over night at Campbellsville, a place of several log houses, one of which was called a tavern, with bolted doors, in a dingy room, half exposed by a candle that was intended to illuminate, Mr. Fuller, late at night, in an awfully solemn way, after administering an oath which he was legally unqualified to, imparted the mysteries of the Government cipher.

John A. Cassell, another beardless youth, was located at Camp Green, near Jamestown. In March, 1862, Bramlette, the commander, was ordered to move his force to Pittsburg Landing. In consequence, many country women came into camp to bid their relations and friends farewell. These people were greatly taken with the telegraph, and one young lady, venturing too much, was severely shocked by the powerful battery, which Weems, operating at Louisville, connected for that purpose. After that the ladies kept away from Cassell and accused him of playing naughty tricks upon them. Sam Bruch, who had a deal of quiet humor about him, reprimanded the young operator in terms which concealed the sting, just as a mother's smile, while berating her boy, convinces the latter that he may do so again with impunity.

Speaking of the ignorance prevailing along that line, concerning the telegraph, it may be added that, while Fuller's builders were constructing the line, one woman ran to them, gesticulating wildly, and exclaimed that they must not construct it past her house. "Why," said she, "I can not even spank my babies without all the world's knowing it;" and a denizen who had discovered a pole that had been struck by lightning, hurried to General Boyle and reported that a message had been lost down that pole. An old countryman about Mount Vernon, Kentucky, at a later period, being told by operator Jones how fast the telegraph was, thought the operator was imposing on him, and interrupting, said, "Stranger, that's a —·· —·· lie.

A humming-bird is the fastest bruit on y'erth, and it can't begin to make the time you say this thing makes." A repairer, who had become expert with the climbers, was trimming trees in Danville, when an old woman who watched his operations, remarked, "What can't these Yankees do! One of 'em was here and walked up and down the trees like a devil."

Cassell moved his office to Jamestown, where, wholly unprotected and thirty miles from any Federal troops, he continued to telegraph. Guerrillas raided the town several times, but the Lucas people, with whom he boarded, although Secessionists, successfully hid the young operator.

The same day that Grant invested Fort Donelson, Buell telegraphed Fuller to construct a line from Stanford toward Cumberland Gap, in East Tennessee, against which place Brigadier General Carter soon moved. The sufferings of Fuller and his party on this route were very great. Nearly every man became sick. To avoid the incessant rain for one night, they slept in a house recently used by the rebels as a small-pox hospital. London was reached March 20. A few days later Charles Stremple, a sick builder left behind, died. General Geo. W. Morgan assumed command of the Federal forces April 11. Flat Lick, beyond Barboursville, was reached by the telegraphers April 20, and Cumberland Ford a week later. Then the rebels destroyed seven miles of line, which was rebuilt. May 10, the wire was extended ten miles up Clear Creek to the foot of Pine Mountain. Then a line, thirty-five miles long, running from Colliers Fork to Flat Lick, was built, and that through Barboursville was taken down. Barboursville was put in circuit by a seven mile loop. After much maneuvering by the Federals and Confederates, which nobody can understand without great topographical research, in which each party appeared at times extremely anxious to meet the other, General Morgan, June 18, found the enemy away, on one of his strategetical expeditions, and took peaceable possession of Cumberland Gap, the "Gibraltar of America." Then followed an order to take down thirty-four miles of side lines, and erect twenty miles more connecting the camps of Colonel De Courcey, on the Kentucky road, and Generals Carter and Baird, on the Tazewell road, with the main

stem. This was promptly accomplished. Another line, six miles long, connected the remaining brigade. Knoxville, sixty miles distant, was to be connected, but General Bragg's army coming into Kentucky in the fall, compelled Morgan's to fall back.

Fuller, aided by Foremen Tidd and D. E. Newton, had accomplished a great work among the rocky cliffs, cruel roads and barren mountains of this region. Constantly beset with new difficulties, the corps never faltered. It is a pleasing fact that throughout the war the corps never failed to erect a telegraph over any route, no matter how troublesome or how long, that the troops could themselves pass over. Many a line was built, however, where an army could not pass. From Stanford to Cumberland Gap is one hundred and fourteen miles. This, with the Somerset and Jamestown lines, made, exclusive of say seventy-five miles of telegraph built in the region of the Gap, two hundred and forty-five miles of line erected in the first six months of 1862, in a country beset with armed and unarmed enemies.

After a ride of forty miles, July 2, Fuller became suddenly and dangerously ill. The physician pronounced it a case of poisoning. Whatever it was, Fuller was incapacitated for further service for months. Consequently, Bruch placed Charles Lehr in charge of the district, but before Fuller was able to leave, the rebel Colonel — late Captain — John H. Morgan, the special enemy of the Federal telegraph, with his operator, George Ellsworth, a Canadian, struck Somerset (July 22) on his return from an extensive raid upon the Federal communications, which may properly be here related.

Early in July, after a minor engagement at Tompkinsville, Kentucky, Morgan, with two regiments and several companies of cavalry, entered Glasgow at midnight and halted near Cave City, a station on the Louisville & Nashville Railroad. Morgan, Ellsworth and fifteen soldiers reached a point half a mile below Horse Cave, on the tenth, when Ellsworth connected his telegraph instrument with the main line to read passing telegrams. By the use of a ground wire, he cut the southern towns from the circuit, and answered for them when the northern towns

called, without awakening suspicion. The first message of consequence, was as follows:

LOUISVILLE, July 10, 1862.

To S. D. BROWN, Bowling Green:

You and Colonel Houghton move together. I fear the force of Colonel H. is too small to venture to Glasgow. The whole force should move together, as the enemy is mounted. We cannot venture to leave the road too far, as they may pass round and ruin it. (Signed) J. T. BOYLE,

Brig. Gen. Comdg.

The Louisville operator, for about two hours, was busy sending messages, he supposed, to Nashville, which were mainly commercial. These had to be repeated the next day. At about midnight, before returning to camp, Morgan manufactured and Ellsworth telegraphed the following message:

NASHVILLE, Ju.y 10, 1862.

To HENRY DENT, Provost Marshal, Louisville:

General Forrest, commanding a brigade, attacked Murfreesboro, routing our forces, and is now moving on Nashville. Morgan reported to be between Scottsville and Gallatin, and will act in concert with Forrest, it is believed. Inform the general commanding. (Signed) STANLEY MATTHEWS,

Provost Marshal.

Moving north-easterly, Morgan entered Lebanon quite unexpectedly, very early on the morning of the twelfth, capturing a few prisoners. Ellsworth, with a suitable guard, quickly took possession of the telegraph office, where he found on file the following telegram:

LEBANON, July 11, 1862.

GEN. J. T. BOYLE, Louisville, Ky.:

I have positive information that there are four hundred marauders in twenty miles of this place, on the old Lexington road, approaching Lebanon. Send reinforcements immediately.

(Signed) A. Y. JOHNSON,

Lieut. Col. Comdg.

At this time the author was day, and W. H. Drake, night operator at Lebanon Junction, and D. E. Martyn at Lebanon.

Martyn successfully eluded capture by hiding in the willows of Aqua Closet Run, which, he said, "odoriferously effervesced noisome effluvia, but was an awful good place to hide in." When the author came on duty, he inquired of "B" (Lebanon), about Morgan, and was informed that some of his troops had attacked the place, but were driven off. He then sent a message, to which the operator at "B" signaled "OK," a signal never used by Martyn, who should be on duty. This caused suspicion that all was not right. It was slim evidence, and soon overcome by Drake's declarations that he had been talking with him by the hour. This is a sample of the conversation Drake had been holding. To "B"—What news? any more skirmishing after your last message?" To "Z" (the call for the Junction)—No; we drove what little cavalry there was away. To "B"—Has the train arrived yet? To "Z'—No. About how many troops on train? To "B"—Five hundred; Sixtieth Indiana, commanded by Colonel Owens. Ellsworth's curiosity being excited as to what station "Z" was, he became puzzled how to ascertain it without creating suspicion. Finally, he adopted the following plan. To "Z"—A gentleman, here in the office, bets me the cigars you can not spell the name of your station correctly. To "B"—Take the bet. L-e-b-a-n-o-n J-u-n-c-t-i-o-n. How did he think I would spell it? Ellsworth—He gives it up. He thought you would put two b's in Lebanon. Drake—Ha, ha! He's a green one. Ellsworth—Yes, that's so. What time did the train with soldiers pass? Drake—8:30 last night. Ellsworth—Very singular where the train is! Drake—Yes, it is. Let me know when it arrives. (Later). The train has returned. They had a fight with the rebels at New Hope. The commanding officer awaits orders here. Ellsworth—Give us the particulars of the fight. Colonel Johnson is anxious to know all about it. Drake—Here is Moore's message to General Boyle:

LEBANON JUNCTION, July 12.

To GENERAL J. T. BOYLE, Louisville:

At eleven o'clock last night, at New Hope Station, part of my command encountered a force of rebel cavalry posted on the country road, one-half mile south of the railroad. After a brisk fire of musketry for twenty minutes, the enemy was routed, and fled.

Skirmishers were sent out in different directions, but were unable to find the enemy. At three this morning, apprehending that an effort might be made to destroy the bridges in our rear, we moved down to New Haven and remained until after daylight, when the train went back to the scene of the skirmish. A Mr. Foreman, of Owen County, was found, mortally wounded. He reported the rebel force at five hundred and fifty, under command of Captain Jack Allen, and that they had fallen back toward Greensburg. One horse was killed, and three captured. The books of the company were found on the field. Blood was found at different places, showing that the enemy was severely punished. No casualties on our side. Here, with train, awaiting orders.

(Signed) O. F. Moore, *Commanding.*

At nine, A. M., the following was sent by Z, which was a repeating station for the Cumberland Gap line :

Louisville, July 12.

To Colonel Johnson, Lebanon :

Leave good guard, and join Colonel Owens. Pursue the enemy and drive him out. Be cautious and vigorous. Make no delay.

(Signed) J. T. Boyle, *Brig. Gen. Comdg.*

Louisville, July 12.

To Colonel Owens, Lebanon :

You will move after the enemy, and pursue him.

(Signed) J. T. Boyle, *Brig. Gen. Comdg.*

About noon, and before Owen's arrival, Morgan left Lebanon for Midway, a station equi-distant from and between Frankfort, the State capital, and Lexington, where operator J. W. Woolums was captured and made to ask Lexington the time of the day (ten, A. M., fifteenth), so that Ellsworth could discover his style of operating. Lexington office telegraphed the operator at Midway :

Will there be any danger in coming to Midway ? Is every thing right ? (Signed) Taylor, *Conductor.*

Ellsworth replied :

To Taylor, Lexington :

All right. Come on. No sign of any rebels here.

(Signed) Woolums.

But the train which started, returned, and escaped capture. About this time the author arrived at Frankfort to assist the operator there, while Morgan threatened the place, and he well remembers that Ellsworth was quickly discovered, after he began attempting Woolums' style, and consequently that military dispatches were sent to Lexington, in cipher, *via* Cincinnati, and the Lexington operators were warned to look out for Ellsworth, who, however, reports further operations by use of his ground wire, which cut off Frankfort. Ellsworth says:

Again I answered, and received the following message:

LEXINGTON, July 15, 1862.

To GENERAL FINNELL, Frankfort:

I wish you to move the forces at Frankfort, on the line of the Lexington railroad immediately, and have the cars follow and take them up as soon as possible. Further orders will await them at Midway. I will, in three or four hours, move forward on the Georgetown pike. Will have most of my men mounted. Morgan left Versailles this morning at seven o'clock, with eight hundred and fifty men, on the Midway road, moving in the direction of Georgetown. (Signed) BRIG. GEN. WARD.

This being our position and intention exactly, it was thought proper to throw General Ward on some other track; so, in the course of half an hour I manufactured and sent the following dispatch, which was approved by General Morgan:

IDWAY, July 16, 1862.

To BRIGADIER GENERAL WARD, Lexington:

Morgan, with upwards of one thousand men, came within a mile of here, and took the old Frankfort road, bound, as we suppose, for Frankfort. This is reliable. (Signed) WOOLUMS, *Operator*.

In about ten minutes, Lexington again called Frankfort, when I received the following:

LEXINGTON, July 16, 1862.

To GENERAL FINNELL, Frankfort:

Morgan, with one thousand men, came within a mile of here, and took the old Frankfort road. This dispatch received from Midway, and is reliable. The regiment from Frankfort had better be recalled.

(Signed) GENERAL WARD.

I receipted for this message, and again manufactured a message to confirm the information General Ward had received from Midway, and not knowing the tariff from Frankfort to Lexington, I could not send a formal message, so, appearing greatly agitated, I waited until the circuit was occupied, and "broke in," telling them

to wait a minute, and commenced calling Lexington. He answered with as much gusto as I called him. I telegraphed as follows :

FRANKFORT TO LEXINGTON :

Tell General Ward our pickets are just driven in. Great excitement. Pickets say the force of the enemy must be two thousand.

(Signed) OPERATOR.

It was now two, P. M., and General Morgan wished to be off to Georgetown. I ran a secret ground connection, and opened the circuit on the Lexington end. This was to leave the impression that the Frankfort operator was skedaddling, or that Morgan's men had destroyed the telegraph. We arrived at Georgetown about sundown. I went to the telegraph office ; found it locked ; enquired for the operator (Smith), who was pointed out to me. * * After tea I put in my own instruments. After listening an hour or two at the Yankees talking, I opened the conversation, as follows, signing myself "Federal Operator." To Lexington—"Keep mum. I am in the office, reading by the sound of my magnet in the dark. I crawled in when no one saw me. Morgan's men are here, camped on Doctor Gano's place." To Georgetown—"Keep cool. Don't be discovered. About how many rebels are there." To Lexington "I don't know. I did not notice, as Morgan's operator was asking me about my instruments. I told him I sent them to Lexington. He said 'Damn the luck,' and went out." To Georgetown—"Be on hand, and keep us posted." To Lexington—"I will do so. Tell General Ward I will stay up all night, if he wishes." To Georgetown—"Mr. Fulton wishes to know if the rebels are there." To Cincinnati—"Yes, Morgan's men are here." To Georgetown—"How can you be in the office, and not be arrested ?" To Cincinnati—"Oh, I am in the dark, and am reading by the magnet." To Georgetown—"Where is your assistant?" I replied, "Don't know." Lexington then asked me, "Have you seen him to-day ?" I replied "No." That was the last telegraphing I could do in Georgetown, as it exposed the fraud, the operator having no assistant.

The operators at Cynthiana and Paris decamped with their instruments. At Cynthiana, Morgan was resisted quite bravely, but the place was gained, and several hundred prisoners taken, after an aggregated loss of over one hundred killed and wounded. Morgan soon reached Richmond, where he hoped to remain and collect recruits, but General G. Clay Smith and Colonels Wool-

ford, Medcalf, Munday and Wynkoop were seeking his capture, so he moved to Crab Orchard, striking the Cumberland Gap line again. Connecting his instrument, Ellsworth claims to have once more deceived the Union operators on this line, especially at Somerset, which place was reached the same day. Ellsworth's claims are doubtless entirely fictitious. The operators on this line had been notified to be on the look out for him, and operator Ellison, at Somerset, made his escape. Ellsworth did connect near Crab Orchard and hear some of the precautionary suggestions, but nothing of value to him or Morgan. James Jones was operator at Mt. Vernon, and about ten, A. M., some one called his office ("MC"), and asked: "Where's Morgan?" Jones at once became satisfied from the style of operating that it was Ellsworth, but, feigning satisfaction, he promptly but falsely replied; "Morgan was south of Richmond this morning. Woolford's cavalry and the Ninth Pennsylvania Cavalry are in close pursuit. Our troops here are preparing to cut Morgan off in the direction of Somerset. I think we will bag the rascals." The force at "MC" consisted of one convalescent, the operator and about forty home guards. A party of them afterwards scouted into Crab Orchard, but saw no enemy, and returned. Jones had hurried Morgan's whole force to Somerset by the direct road, which place he hoped to reach ahead of the "MC" column. Thus Morgan was fairly driven by telegraph.

Ellsworth was readily discovered on the wire at Somerset. James Meagher, operating at Stanford, was run out of town by a detachment of Morgan's men, who shot at him while he was climbing a fence. One ball passed between his legs, taking out a slice, but there was no catching Jimmy, who had been a prisoner at Columbia. The following telegrams were sent or received by Ellsworth, at Somerset.

SOMERSET, July 22, 1862.

To GEORGE D. PRENTICE,* Louisville:

Good morning, George D. I am quietly watching the complete destruction of Uncle Sam's property in this little burg. I regret exceedingly that this is the last that comes under my supervision on this route. I expect in a short time to pay you a visit, and wish to know if you will be at home. All well in Dixie.

JOHN H. MORGAN, *Commanding Brigade.*

*The most prominent editor in the State.

To General J. T. Boyle, Louisville:

Good morning, Jerry; this telegraph is a great institution. You should destroy it, as it keeps me too well posted. My friend, Ellsworth, has all your dispatches since the 10th of July on file.* Do you wish copies?

John H. Morgan,
Commanding Brigade.

To Hon. Geo. W. Dunlap, Washington, D. C.:

Just completed my tour through Kentucky; captured seventeen cities, destroyed millions of dollars worth of United States property. Passed through your county, but regret not seeing you. We paroled fifteen hundred† Federal prisoners.

Your old friend, John H. Morgan,
Commanding Brigade.

Barboursville, Ky.

To General John H. Morgan, Somerset:

General: I am informed that you have my field glass and pistols, captured in my camp on the pike between Lebanon and Campbellsville, Kentucky, January 31. Please take good care of them. Yours truly, W. G. Fuller.

Somerset, Ky., July 22.

To W. G. Fuller:

Glad to hear that you are well. Yes; I have your field glass and pistols. They are good ones, and I am making good use of them. If we both live till the war is over, I will send them to you, sure. (Signed) John H. Morgan.

From Somerset Morgan proceeded to Monticello, Livingston and Sparta, and went into camp, having traveled over one thousand miles in twenty-four days.

The following operators were on the Gap line, patriotically enduring untold privations, *viz:* at Stanford, James Meagher and J. R. Clark; at Mt. Vernon, James Jones; at London, J. G. Garland until relieved by Frank Benner; at Barboursville, J. G. Garland until relieved by Hugh Craig; at General Geo. W. Morgan's head-quarters and about the Gap, John A. Cassell, Hugh Craig, J. G. Garland and Robert Wagner. The next time we meet these young men, they will be found surrounded on all sides by Confederate forces, and after much personal

*A joke based on a smattering of fact. †An exaggeration.

adventure, risk and hardship, we will honorably land most of them on the banks of the Ohio. But while they are rusticating among the ignorant, eating hot corn bread, corn dodgers, corn hoe cakes, corned pork, fresh pork fattened on corn, sweet potatoes and hard tack, we will inquire after the corps in the southward march with General Don Carlos Buell.

We left the main army in the middle of November, at Muldraugh's Hill. When Sherman succeeded Anderson, Rousseau took the immediate command and advanced to Nolin, on the Louisville & Nashville Railroad, fifty-three miles from Louisville. A. D. McCook arriving, ranked Rousseau. McCook, by order of Buell, December 9, 1861, advanced to Bacon Creek, near Munfordsville, where General O. M. Mitchell joined the army. The first United States Telegraph built south of Louisville was an eighteen mile loop, erected in January and February, along a branch of the Louisville & Nashville Railroad, connecting Bardstown and Bardstown Junction. Samuel L. Risdon opened and operated the office at Bardstown. C. H. Griffith and G. W. Rouser were operators at Mitchell's head-quarters after his arrival and assuming command at Bacon Creek; Martin Barth was at McCook's office, and when Munfordsville was taken, D. C. Sellers operated that office.

It is said that while at Bacon Creek, C. H. Griffith and Thomas Anderson, then a citizen of New Albany, Indiana, a Federal spy, escorted by five companies of the Fourth Ohio Cavalry, went through Edmondson County, *via* Mammoth Cave, and struck the railroad between Rocky Hill and Smith's Grove, and between the forces of Generals Hindman and Buckner at Cave City, and those with the commander, General Albert S. Johnston, at Bowling Green. The cavalry returned, leaving Griffith and Anderson, and losing six men in a brush with a portion of Colonel Terry's Texas cavalry regiment. Griffith tapped the telegraph, and copied many important messages, while remaining in the woods three days and nights by the instrument which, it should be stated, can be put in circuit without even opening or breaking the current. So long as an operator is content to remain quiet, and does not allow himself to interrupt the working of the wire, no suspicion is excited; but an operator's manipulation of the key

is almost as distinctively individual as his voice, and if he attempts telegraphing or interferes with others, suspicion is usually aroused.

Near his retreat, Griffith found the line fastened to an insulator on a tree—quite a common thing in those days. Climbing the tree he was able to bend the wire around a dead limb, which held the line taught. He next ran two silk covered wires, no larger than linen thread, down the tree and through the underbrush about sixty feet, where they were connected with his instrument. This accomplished, he filed the main line in two between the fine wire connections, when his office under a ledge of rocks was ready for business. Anderson stood watch outside.

The valuable messages received were then copied on tissue paper in a fine hand and pressed into silver eggs, which were about the size of, and screwed together like ladies' ivory thimble holders. Before starting north, Griffith and Anderson deposited these eggs within their persons. Hiding their instrument, vise, etc., and repairing the wire, after being three days on the line, they started for McCook's head-quarters, but were captured by General Hindman's men. General Hindman's head-quarters, at Cave City, were at the house of Judge Roberts, a Union man. Joe Quigley kept the town tavern, and one Dolby also resided there. These were all Union men. In well-worn citizen's clothes, Griffith and Anderson appeared and were questioned by Hindman; but they told a straight story of how they were trying to reach their homes in Louisville. Hindman, not finding anything suspicious in this, nor about their clothes, remanded them to the guard house, probably without very strict orders. Anyhow, Griffith, being a Mason, was not long in getting leave to go to the hotel kept by old man Quigley, and through the influence of a captain, there found, he got Anderson out also. Dolby and Roberts were here met, and the same story of wanting to get home repeated, and Roberts, it seems, somehow obtained from Hindman passes by which they reached the Union lines and reported, first to McCook and then to Mitchell, who was farther back. Both generals were delighted at the success of the enterprise, and Mitchell telegraphed the results to Buell, at Louisville. It is said that the information so obtained enabled

the Federals to form quite an accurate idea of the forces on the railroad, and of Morgan's preparations at Glasgow.

Sixteen thousand of Johnston's troops were removed from Bowling Green to Fort Donelson, leaving Johnston only about eight thousand, and Buell, before being solicited, started about ten thousand in steamers to Grant's aid. These were the forces that went up the Cumberland with Foote's flotilla, just in time to enable Grant to capture that fortress. Without them, it can not be doubted, had Grant forced a battle, he would have been unsuccessful. Johnston commenced the abandonment of Bowling Green the day that Grant invested Fort Donelson, and on learning of its fall, directed the evacuation of Columbus. He halted a short time at Murfreesboro, thirty miles below Nashville, the capital of Tennessee, to gather the remnants of his Mill Spring and Donelson forces around those that retired from Bowling Green, and then pushed south-west, to Corinth, Miss., which, *via* Waynesboro and Savannah, Tenn., is one hundred and fifty-three miles.

It will be remembered that the Federals did not possess themselves of Cumberland Gap until the middle of June. Had Buell pushed Thomas in that direction, as repeatedly urged, even before and after the battle of Mill Springs, Knoxville, Chattanooga, and the strong mountain fastnesses of all East Tennessee and Northern Georgia, would have fallen into the hands of the Federals, enabling them to work incalculable injury to the Confederates. Between Chattanooga and Corinth there were no railroads or navigable rivers leading south. Corinth, Miss., Chattanooga and Knoxville, Tenn., were on the direct line of the railway running from Memphis, Tenn., through Northern Georgia, East Tennessee and Virginia, to Lynchburg and Richmond. Cut that line, and Johnston, at Corinth, could only communicate by rail with Richmond *via* Meridian, Miss., Montgomery, Ala., Atlanta and Augusta, Ga., or some other route east of Montgomery, but no better, and all leading as far east and south as Branchville, S. C.

Buell had no difficulty in entering Nashville, but the railroad and suspension bridges over the Cumberland at that city were completely destroyed. Bruch repaired the South-western Telegraph Company's lines to Nashville direct, and *via* Bowling

LIBRARY OF THE UNIVERSITY OF CALIFORNIA

Green and Clarksville, rebuilding forty miles that had been destroyed between Bowling Green and Green River.

Bruch and operator Ellis J. Wilson entered Nashville with the troops, and took possession of the city office, but it was not until two days later that operator S. P. Peabody came, and astonished as well as alarmed Bruch by his successful but hazardous efforts to climb the northern pier of the suspension bridge, and handle the wire while it was being stretched across the Cumberland.

While Bruch, Wilson and Peabody were arranging the old telegraph office, Con. Dwyer, fresh from Cleveland, Ohio, was at Bowling Green, with his face southward. Gen. Johnston, before leaving this place, had fired the round-house, which at the time contained about twelve fine engines. The Barren River bridge being destroyed, the Federals tried to construct a train out of the *debris* remaining at Bowling Green. The result was an engine patched up from odds and ends, without head-light, cow-catcher or cab. It looked a snorting wreck on wheels. There were a few cars attached; one was a box car, in which sat the Hon. Andrew Johnson, Military Governor of Tennessee, *en route* for its capital; Dwyer and others also rode there. On a level track the engine was a success, but whenever an up grade was struck, every body but the Honorable Andrew got out and footed it, while the engine made running jumps to reach the top. Finally, late at night, the passengers reached Edgefield, and crossed the river to Nashville. Only one light was visible. That was at the City Hotel, but the proprietor gave Dwyer a withering grin when asked for a room. Piloted to the telegraph office, he finds Bruch and the operators delighted to receive him.

A word about this office, relic of the telegraphic year one. It was upstairs, on Cedar street. The Southern operators had left everything intact. There was a great accumulation of material there, in anticipation of being cut off from the North. This was devoted to Federal purposes. There was rubbish of all kinds lying about. A long table, breast high, ran across in front, over which was a frame, and on that was a network of wires. From this primitive switch, the wires depended to thumb-screws, and thence to instruments. These latter had the old time high resistance magnets, with registers. Beneath the table

were great boxes to receive the paper strips; also high stools on which the operator sat and gradually became stoop-shouldered and consumptive. In the rear, well back, where it was almost dark, sat old Mr. Carville, the former manager, a fine specimen of the old time gentleman. He could not telegraph. His duties were mainly to audit the accounts. At the head of the stairs was an eight by ten sleeping room, where mosquitoes and bed-bugs did most of the sleeping. As theirs was entirely night work, they were not disturbed of their rest, but it was hard for an operator to sleep when their business hours came. The bugs were quiet and unobtrusive until the operator was asleep; then they flanked him on all sides. They even co-operated with the mosquito. This insect had a plan of singing continually, unless engaged in sharpening his tools or at lunch. His song, never very agreeable, soon became extremely monotonous. Instead of inviting Morpheus, as some music does, this drove him off. It was worse than the rebel yell. Consequently, when sleep came, it was deep. Everything being quiet, the bugs and mosquitoes put in their big licks. The sleeper, with a groan or a sigh, grows restless. That is a part of the scheme, for he unwittingly kicks the clothes off. When dawn appears, the operator discovers he has been throwing up breast-works all over himself. He feels as if they had been mounted by mitrailleuses, and then he thinks—"Home, sweet, sweet home; be it ever so humble, there's no place like home."

The provost guard reported finding in the city about seventy miles of unfinished wire in process of manufacture. Dwyer, Ellis J. Wilson, S. P. Peabody, Philip Bruner, late of Somerset, Ky. office, Mark D. Crane and D. C. Sellers operated there in March. In April, J. S. Cotton came. Martin Barth followed the army until taken sick, in February, when he was permanently located at Bowling Green.

From Nashville there were two great railroad routes leading south, and joining the road which connects Memphis with Richmond, Va. One ran almost due south, to Decatur, Ala., and the other south-east, to Stevenson, Ala. Johnston fell back slowly to Decatur and Corinth. While in the neighborhood of Columbia, C. H. Griffith and Tom Anderson disguised as tin peddlers, again essayed to tap the telegraph; this time between Lynnville

and Columbia. Near Columbia they sold out their horse, wagon and stock to a country store-keeper. Then they separated, one going toward Lynnville, and the other in the direction of Columbia; but they met, after much trouble, near the railroad, where Griffith listened to Confederate telegrams for one day and a part of two nights, taking copies as before. Hindman's old pass was considered good by the Confederate pickets, consequently Griffith had no trouble in reaching the Union lines; but Anderson barely got in with the Federal forces again, as he took a route *via* Shelbyville, where he had to kill a man to escape.

Griffith was sent to the Gallatin, Tenn., office, in March, where he did not cut so good a figure. On Sunday, the sixteenth, Captain John H. Morgan, with about forty of his men, suddenly entered the town. We will let the Rev. F. Senour tell the rest, as he does in his "Morgan and his Captors":

> Morgan's first act was to arrest all the Union men of the place, and confine them in the guard-house; then he dressed himself in the uniform of a Union soldier, and proceeded to the telegraph office at the railroad depot, a short distance from the town. Entering the office, the following conversation took place: "Good day, sir! What news have you?" "Nothing, sir, except it is reported that the rebel Morgan is this side of the Cumberland, with some of his cavalry. I wish I could get sight of the rascal; I'd make a hole through him!" While thus speaking, the operator drew a fine Navy revolver, and flourished it as if to satisfy his visitor how desperately he would use it, if he should happen to meet the famous guerrilla. "Do you know who I am?" quietly remarked Morgan. "I do not," replied the operator. "Well, I am John Morgan." At these words, the operator's cheeks blanched, and his knees smote together, as did Belshazzar's, when he saw the mysterious handwriting. After the frightened man had somewhat recovered, Morgan required him to telegraph a message to George D. Prentice, of the Louisville *Journal*, in which he politely offered to act as his escort on his proposed visit to Nashville.

But Griffith, who ought to know more than the reverend historian about this affair, says he was captured while north of the town, repairing the line, and was sent to Corinth; escaped, and was recaptured, and finally sent to Macon, and then to Libby Prison, from which he was taken and exchanged, November 15

1862, after very great suffering. He had scarcely got back at work again, after recruiting some strength, when Morgan entered Elizabethtown, Ky., where he was located. Griffith narrowly escaped, by speedy flight.

March 11, President Lincoln extended Halleck's department, so as to include all of Buell's west of a north and south line drawn indefinitely through Knoxville, and called Halleck's, the Department of the Mississippi. At this time, Buell's forces, exclusive of those sent Grant, numbered 94,783 men, 73,472 of whom were serviceable. These troops were divided; the principal part, under Buell, numbering of all arms, 37,000 men, started, March 15, to reinforce Halleck's army under Grant, at Pittsburg Landing. Another force, under G. W. Morgan, was sent to join Carter's, north of Cumberland Gap, and another, under O. M. Mitchell, to possess the Memphis and Charleston Railroad in the neighborhood of Huntsville, Ala. The remainder was located on the communications.

We have already disclosed Federal General Morgan's operations at the Gap. While Buell is making his slow progress, *via* Columbia and Waynesboro, to Savannah, Tenn., opposite Pittsburg Landing, we will turn our attention to Mitchell. He, too, started about the same time Buell did, repairing burned railroad bridges as he progressed to Murfreesboro. From thence, he pushed rapidly on through Shelbyville and Fayetteville, striking Huntsville, Ala., early April 7. It was a great surprise, resulting, besides the capture of a few troops and some valuable property, in taking fifteen locomotives and one hundred and fifty cars. The following day an expeditionary force was placed on the cars for Stevenson, on the east, and another for Decatur and Tuscumbia, on the west. Thus in a few days, one hundred and twenty miles of the Memphis and Charleston road, and its bridges, were in the hands of the Federals. It was a bold and brilliant operation. Chattanooga was threatened, and Corinth cut off from the direct line East. Because it *was* bold, it has been severely criticised. Because it was remarkably successful, Mitchell received, as he seemed to deserve, a major general's commission. True he could not have gained these successes

without the railroad, and even with it, he could not have retained his hold without the telegraph.

J. Newton Crittenton was head-quarter's operator, having been hurriedly recalled from Waynesboro to take charge of the lines in Northern Alabama. They needed but little repairing from Stevenson to Decatur, eighty-four miles. He was not then in telegraphic communication North, and hence held, under Mitchell, supreme control. A Mr. Brady was his foreman of builders. In March, the line followed Mitchell to Shelbyville (sixty miles), on the N. & C. R. R., and five miles beyond, toward Huntsville, when most of it was abandoned; but the last of April or the first of May, the telegraph was repaired, *via* Columbia, to Decatur, a distance of seventy-one miles. The building party, under one Keenan, on reaching a point thirty miles south of Columbia, was overhauled by that ubiquitous rebel, John H. Morgan, and all but Keenan captured. Morgan destroyed all the camp equipage, wagons, tools, seven hundred insulators, etc., and by paroling the builders effectually stopped the work, until Bruch could organize anew and refit. Owing to this delay, Decatur and Nashville were not connected until May 20.

Mitchell was enabled to capture at least two large trains complete, by telegraphing "It is perfectly so," in response to a message from an officer of the Memphis and Charleston road, inquiring of Larcombe, its superintendent at Huntsville, if it was safe to send along trains. During the four months and ten days that Mitchell or his successor held this section, telegraphic communication with the posts was constant, and the commander was accustomed frequently to talk with subordinates by telegraph. Offices were early opened at Huntsville, Paint Rock, Athens, Bridgeport, Stevenson, Elk River, Larkinsville, and Bellefonte, and later, at Decatur Junction, Battle Creek, Mooresville, Tullahoma, Pulaski, Reynolds, Shelbyville, Wartrace, Decatur, Madison, Tuscumbia, forty-three miles west of Decatur, and Courtland. These were operated by Samuel Carey, W. H. Kelsey, George E. Cromwell, J. S. Lyle, T. M. Sampson, Robert Wagner, J. W. Richardson, G. W. Bliestine, W. H. Hartman, J. H. Sigler, A. Ellison, J. A. Fuller, H. Lithgow, F. B. Tyler, C. W. Besanson, J. P. McIlvaine, D. McCarty, A. J. Howell, B. McMurtrie, C. W. Hammond, W. H. Parsons, S. T.

Yonkers, W. B. Reddington, George Purdon, Christopher Dougherty, Dan Murray and W. W. Forbes.

About the middle of April, a party of twenty-two soldiers and two spies, all dressed as citizens, with the approval of Generals Buell and Mitchell, entered Chattanooga in squads, and took train for Marietta, Ga. Their purpose was to steal an engine at Big Shanty, near Marietta, and, running north on passenger train time, burn the principal bridges *en route* to, and even beyond, Chattanooga. What could be more venturesome? Taking the north bound passenger train, they were able to possess themselves of the engine and one car at Big Shanty, and start on their perilous undertaking. There was no telegraph office at Big Shanty, although several regiments were stationed there, "but," says Pettinger, one of the twenty-one that succeeded in taking the train, and who has written the history of the affair, "the telegraph ran by our side, and was able by the flashing of a single lightning message to arrest our progress, and dissipate all our fondest hopes." After running four miles, the wires were cut. Further on, the party was, according to the time card, to meet and pass a freight train. This they did, but two extras were signaled. These greatly delayed the Unionists, and enabled a party from Big Shanty, under the leadership of the conductor, on a hand-car first, and then on a freight engine, to nearly overtake the Federals. Conductor Fuller's party, taking the engine of the last freight, continued the pursuit most vigorously. It was a desperate railroad race, in which the brasses in the journal boxes of the forward engine melted. Andrews' party, for he was in command of the raiders, sought to impede pursuit by throwing off the railroad ties they had collected, and occasionally tearing up a rail, but the pursuers overcame every obstruction about as fast as they were interposed. At every telegraph station, however, the conductor was informed that Andrews' party had cut the line ahead. Thus the race continued, passed Allatoona, Cartersville, Kingston, Adairsville, Calhoun and Resaca; passed Dalton and to within fifteen miles of Chattanooga—altogether ninety-three miles. The rain and wind prevented firing their car, which they attempted, and the inexorable pursuit continued as determined as ever. Operator R. O. Camp, or Ed. Henderson, joined Fuller's party to telegraph ahead when-

ever possible. Two minutes before Andrews, after passing Dalton, had time to break the wires, Chattanooga office was informed, whereupon cannon were there planted on the track, and trees felled across it. The excitement became intense, and the women and children took to the woods. Near Chickamauga station, the party leaped from their car and scattered in the woods, but pursuit and search was relentless. The people all turned out to hunt. Every one of the party was captured. Seven were condemned at Knoxville, as spies, and hung at Atlanta. Fourteen escaped from prison, six recaptured and *exchanged as prisoners of war;* six reached the Union lines, and two were never heard of again.

We have said that Buell's progress was slow. Bruch's builders and some soldiers, under operator J. N. Crittenton, repaired the old line over the pike to Franklin, and then cut across the country to within six miles of Waynesboro, erecting sixty-eight miles of new line. Crittenton frequently connected his instrument to receive or send Buell's messages. At this point, George H. Smith's party of builders were met, they having put up thirty-seven miles of telegraph east from Savannah. So imperfectly was this line constructed, that it was almost impossible to utilize it. The wire was carried through dense woods, and fastened to living trees, sometimes with insulators, but often without, consequently the aggregate resistance between Franklin and Savannah, especially on rainy days, amounted almost to a perfect ground connection, and not unfrequently rendered the line entirely unserviceable, a difficulty which no amount of subsequent repairing could appreciably affect. At this time, Con. Dwyer, an able electrician from Cleveland, Ohio, manager of the Nashville office, was assisted by operators Sargent P. Peabody, Ellis J. Willson and Claud Knox, all of them first class operators. They had no hours, but one would attend the Louisville circuit, another the Savannah wire, until exhausted, when he would be relieved by the third, who had been sleeping. As this system continued until August, when the author reinforced the trio, the boys deserved greater credit than they received for their perseverance. Afterwards, two operators were on, and two off duty, every twenty-four hours. As the Savannah line could not

be worked by either office against a battery at the other, owing to the escape, a switch was arranged at the key so that the full force of the battery went to line while sending, but was off while receiving. By this means and the exercise of more patience than Job was ever credited with, the vast business of the armies at the front, aggregating, under Halleck, one hundred and twenty-thousand muskets, was kept up.

While this line was building, and Buell advancing to meet Grant, Halleck granted Buell's telegraphic request to halt and rest at Waynesboro, but Nelson in the advance seemed possessed of a premonition of danger. He, therefore, hastened beyond all expectations, and when Buell was ready to order a halt, Nelson and other parts of the army were too far ahead. This was providential. Grant, Halleck and Buell, all, were untroubled. An attack was not wholly unexpected, but was not looked for so soon. April 3, Smith's party of telegraph builders and an operator met Nelson, and established communication with Grant. Nelson had yet two days' march when Grant telegraphed him he need not hasten, as the transports to convey him to Pittsburg Landing would not be ready before the eighth. But Albert S. Johnston, commanding the enemy, had concentrated all of his forces, except VanDorn's from Arkansas, and was at that moment moving out of Corinth to overwhelm Grant.

The evidence is too convincing to admit a doubt, that neither Grant nor Sherman expected a general attack at any time prior to the sixth, when it really began. Certain writers, admitting this fact, say there was no surprise, because General Grant had telegraphed Halleck the day before the battle: "I have scarcely the faintest idea of an attack (general one) being made upon us, *but will be prepared should such a thing take place*," and because the enemy had been exhibiting themselves somewhat saucily for days before the battle. The day after Shiloh (April 8), Sherman in his official report wrote: "On Saturday (fifth) the enemy's cavalry was again very bold, coming well down to our front; yet I did not believe they designed *anything but a strong demonstration.*" Of course these officers were surprised by the general engagement, commencing early on the sixth, but it is urged that, as Sherman had picket guards unusually advanced, there was no such surprise as brings disgrace to an officer who,

in the face of an enemy, neglects proper precautions, *i. e.*, that though the attack was unexpected, it was not unanticipated. The discussion of this question involves a reproduction of too much conflicting evidence for our space or purpose. General Grant's head-quarters were at Savannah, nine miles from the main forces under McClernand and Sherman, at Pittsburg Landing and Shiloh Church. There was no telegraph line between these places, and the so-called "telegrams," sent by Sherman to Grant, April 5, according to Van Horne's "History of the Army of the Cumberland," advising Grant of appearances, were in fact notes, delivered by special messenger.

At break of day on the sixth, the noise of "resounding arms" summoned Grant in haste to Pittsburg Landing, notwithstanding an appointment to meet Buell that day at Savannah. The steamer "Tigress" from the North reached Savannah at three o'clock in the morning. Among her passengers were Wayne H. Parsons, from the Tipton, Missouri, and Leander H. Parker, from the Paducah, Kentucky, offices. These operators, on hearing the "cannon's opening roar," hastened to report to General Grant, and by his directions accompanied him to Pittsburg Landing, remaining on the boat to receive any message that might be entrusted to them for delivery. From early morn till late in the eve, forty thousand Confederates were hurled against thirty-three thousand Federals, largely raw troops, some of whom had been in the service but eleven days. Except that the Federals had the choice of position, it was an open field fight, there being few if any artificial defenses. Nelson's division on the eastern, and Lew Wallace's on the western shores of the river, were misled as to roads, and Wallace, though in the morning but five miles from the battle-field, did not reach it until seven P. M., and a portion of Nelson's column only came into position at five o'clock, when both sides were exhausted, but his coming was fortunate indeed.

The Federal gunboats, which, in the latter part of the day, while the Federals were hugging the river bank, or being hemmed in a greatly contracted circle, poured grape and canister into the ranks of the enemy with terrible effect, kept up their fire with shells throughout the night, penetrating various rebel camps and firing the woods; thus making sleep, for the enemy,

almost impossible. Monday morning the Confederates, reduced by various causes — deaths, wounds, details and desertions — to twenty thousand, answered to the reveille which seemed like a death knell to them. Besides the fight of the sixth, in which they lost their great commander, Johnston, and the shelling and fires in the night, the rain set in; it was after that horrible day and dreadful night that, thoroughly drenched, they were early called to a renewal of the carnage, only to discover in their great weakness, that Grant was reinforced by twenty thousand fresh and gallant troops of Buell's army. The wonder is, not that the Confederates retreated at two P.M., after an obstinate resistance, but that they covered their retreat so well and retained Corinth so long.

Nothing is so descriptive of a battle as the casualties. Grant and Buell's loss was 12,217 men, of whom 1,700 were killed and 7,495 wounded, the rest missing. Buell's army alone lost 2,167, mostly killed or wounded. Beauregard, who succeeded Johnston, admitted a loss of 1,728 killed, 8,012 wounded and 957 missing; being an aggregate of 10,697.

The telegraph from Nashville to Savannah was completed in good time to announce a Federal triumph. The Savannah office was opened at the front window of a deep store, which was filled with wounded from the field of battle. Three rows of camp cots were placed the length of the room, and on every one rested a wounded soldier, some of whom were nigh unto death. Every available room in the village was similarly occupied. Messages concerning the wounded, the dead and the living, the defeat and the victory, came pouring into the Savannah office by the hundreds, for transmission north. All over the North went those tidings of sadness or joy from the little pocket instrument, manipulated mainly by Parsons and Parker, but sometimes by George A. Purdy. During the first night, a number of those whose groans swelled the agonizing chorus which made the tick, tick, tick, of the instrument scarce audible, after dictating a telegram to their friends, bidding a long farewell, slept "the sleep that knows no waking." Throughout all the Northern States and at the nation's capital, operators, officers and newsmen, all night long on that memorable seventh, awaited with bated breath and hearts well nigh choking them, the

tidings which the weary operators at Savannah and Nashville hurried to their respective destinations.

General Halleck arrived at Pittsburg Landing on the 11th of April, and with him came Duncan T. Bacon, L. C. Weir and a well organized corps of telegraph men. Weir, as chief operator in the St. Louis office, perspired over the ciphers of the Department General until Halleck came, when he was employed at that officer's head-quarters, exclusively with cipher duties. He continued so to serve Halleck, sometimes, however, assisting

PARKER'S OFFICE.

Generals Cullum and Judah in the preparation of army papers, until the General was called to Washington by a cipher message from the President and made General in Chief of all the armies. This was after the occupation of Corinth by the Federals, and on this occasion Weir, who accompanied Halleck as far as Cincinnati, was offered a staff appointment with him, and a commission as lieutenant in the regular army or major in the volunteer service, but he preferred his former employments.

Shortly after Bacon's arrival at Pittsburg Landing, he aided Sol Palmer, foreman of builders, in laying a telegraph cable across the river at that place. The line having been built from Savannah, communication was thus completed to

Nashville. The first office at the Landing was unique. It illustrates the marvelous adaptability of the Corps to the emergencies of army life. The cable was too short to cross the river, but long enough to reach a lodged tree projecting from the west bank some distance over the water, and, consequently, it was determined to establish the office thereon. Here, L. D. Parker opened communication with the North. His instrument rested on the trunk; a limb held his letter clip and paper. Parker long sat astride his office, sending and receiving important dispatches, while being harassed by mosquitoes. After all, glory does not thrive in parlors, nor on cushioned seats. It was while vexatiously adjusting his instrument for Nashville's long messages and meaningless ciphers, that the mosquitoes began cupping him. While enduring their torments his game leg, for the first time in his life, served him best, for his other was a foot (*pes*) too long or the water so much too high, and consequently immersed that extremity, but what booted it so that he advanced the good cause. A number of couriers stood about, throwing stones at the numerous frogs, whose guttural notes were cut short by the surprising delivery of the blue-coats. Some aimed vexatiously at the complacent turtle seeking a sun bath, and thereby caused him either to draw in behind his works, or seek safety in the bosom of the deep. All these things happened within a stone's throw of freshly hallowed ground, and yet Parker was not brevetted on the spot, nor were there any tender hands to stay the ravages of the stinging gnats.

CHAPTER IX.

THE TELEGRAPH WITH GENERAL POPE IN VIRGINIA.— CEDAR MOUNTAIN.— GROVETON.— CHANTILLY.— HARPERS FERRY.— SOUTH MOUNTAIN.— ANTIETAM.

As heretofore noted, McClellan's army lay at Harrison's Landing on the James River until about August 14, 1862. McDowell had, as he predicted, failed to cut off Jackson in the Shenandoah, and Fremont's co-operation proved, indeed, ineffectual, but by Jackson's speedy flight to succor Lee and avoid the forces of McDowell, Banks and Fremont, possession of the great valley was again optional to the Federals, and consequently the Winchester telegraph was speedily re-opened. W. J. Dealey and G. J. Lawrence operated at Harpers Ferry, and J. D. Tyler and Charles H. Lounsberry, at Winchester. Major General John Pope, of great reputation in the West, was summoned to Washington on the day of "Mechanicsville," and assumed command of the "Army of Virginia" the day after "Gaines' Mills." Pope's new department included McDowell's, Banks' and Fremont's commands, and his paramount idea was to concentrate such of these forces as might safely be brought to the Rapidan, with a view of active co-operation with McClellan in the latter's designs against Richmond; thus at once assuming the offensive, besides forwarding McClellan's like purpose, and in that activity also effectually defending the national capital and preventing raids down the valley. Sigel, who succeeded Fremont, as the latter was indisposed to serve under a junior officer, located his forces in the neighborhood of Sperryville; General Banks' were mainly posted a little east; there W. C. Hall and J. B. Pierce attended to his telegrams and ciphers. Pope established his quarters at Culpeper Court House and was surrounded by McDowell's forces. This trinal army was strengthened by the opportune arrival of Reynolds' division from the Army of the Potomac, and Reno's eight thousand men from Burnsides' corps at

Fredericksburg. Altogether, Pope had an effective force at hand of about fifty thousand men.

Telegraph lines ran along the Orange & Alexandria Railroad from Culpeper Court House to Alexandria, and were operated as follows: Pope's head-quarters office, by R. R. McCaine, J. L. Cherry and Thomas Armor; Rappahannock Station, by J. W. Sampson; Warrenton Junction, by T. N. Loucks and E. Rosewater; Catlett's Station, by Charles Douglass; Manassas Junction, by Fred Fox and W. H. Sheffler; Fairfax Station, by Richard Graham and T. Q. Waterhouse; Burkes Station, by J. A. Flagg and D. B. Tomlinson; Alexandria, by F. T. Bickford, O. H. Dorrence, W. H. Embree, C. H. Johns, J. W. McMullen, A. W. Orton, H. L. Smith and C. L. Snyder. Another wire connected Manassas Junction with Warrenton, where J. H. Nichols was located. The line following the Manassas Gap Railroad to Strasburg had been abandoned since Banks' defeat in the valley. Sperryville and Sulphur Springs were brought into the telegraphic circuit. C. H. Benedict was located at Sulphur Springs and Ed Conway with Sigel at Sperryville. A third wire connected Fredericksburg with Alexandria. P. C. Doyle and Fowler Bradnack worked General Burnside's office at Fredericksburg; C. H. Lithgow was at Falmouth; J. H. Emerick, J. H. Glazier, J. J. and O. H. Kinneman, at Acquia Creek, from whence this line ran to Alexandria. Thus it will be noticed Pope had his forces well in hand and easily directed or watched by telegraph. The Fredericksburg Railroad, superintended by W. W. Wright, and the more northern ones by J. H. Devereaux, supplied the troops. The trains on these roads, which were under the general superintendency of H. Haupt, were run by telegraph. In order to insure the safety of the telegraph, Pope issued an order that the inhabitants along the wire routes should be held responsible for damages done the lines by others than the Confederate army. Such was the general situation of affairs.

Early in August, Jackson, the ubiquitous, crossed the Rapidan in search of Pope, when began that famous campaign, short, sharp and indecisive, which resulted at least in humiliation to the Federals. But, as the Army of the Potomac figured largely in Pope's operations, we will first discover how that came to be so.

We have shown that at the conclusion of the seven days' fighting, McClellan encamped about Harrison's Landing, seventy miles above Jamestown Island. It was not deemed practicable to maintain a telegraph line from Yorktown to the army, and therefore one was built from Yorktown to Jamestown Island, eight miles, and from thence telegrams were sent up the river in despatch boats, a loss of about ten hours each way. Even this means was subject to embarrassments from the enemy, especially on the south bank. At one time forty-three guns opened on the Federal shipping from Coggin's Point. August 3, McClellan was telegraphed to "take immediate means to effect" a removal of his army to Acquia Creek. Pending the telegraphic protest and discussion which followed this order, McClellan went to Jamestown Island to talk by telegraph with General Halleck, who had, on the 11th of July preceding, been appointed commander-in-chief of all the armies with head-quarters in Washington. On reaching the island, it was discovered that the cable across the Chesapeake was broken, and accordingly McClellan, bent on his purpose, steamed down the James and across to Cherrystone, where C. H. Baker and W. A. Dunn were operators. Entering the office, he wrote :

CHERRYSTONE, August 13, 1862, 11:30 P. M

MAJ. GEN. H. W. HALLECK, Washington:

Please come to the office; wish to talk to you. What news from Pope? G. B. MCCLELLAN.
Major General.

An hour later, McClellan telegraphed, "* * Please read my long telegram, * * *" and Halleck replied at 1:40 A. M., "I have read your despatch ; there is no change of plans. You will send up your troops as rapidly as possible. There is no difficulty in landing them. According to your own accounts, there is now no difficulty in withdrawing your forces. Do so with all possible rapidity," and thereupon General Halleck took his hat and started to leave, but a prominent official present, knowing that McClellan had not had anything like a "talk," or complete understanding, asked the General-in-Chief if he had not any thing else to say to McClellan, but Halleck, replying "No,"

left the War Department office. The fact of Halleck's sudden withdrawal was announced to the operator at Cherrystone, when McClellan sent the following moderate reply :

CHERRYSTONE INLET, August 14, 1862, 1:40 A.M

MAJOR GENERAL H. W. HALLECK :

Your orders will be obeyed. I return at once. I had hoped to have had a longer and fuller conversation with you, after traveling so far for the purpose. (Signed) G. B. McCLELLAN,
Major General.

August 26, McClellan reached Alexandria—a part of his army having preceded him to Acquia, and the rest to Alexandria.

Over a week before the Federals landed along the Potomac, Lee's army was on the banks of the Rapidan, and Pope was skirmishing for time. Cavalry dashes upon the enemy's railroads and telegraphs preceded Pope's spirited campaign of three weeks, which may be said to have begun on the 9th of August, when, troops having been advanced under Banks and Sigel, and one division of McDowell's corps, to meet Jackson, who had crossed the Rapidan, the sanguinary battle of Cedar Mountain was fought. In this battle, the troops under Banks, to the number of ten thousand, were hurled against twenty thousand, until late in the evening, when Pope and reinforcements arrived. Pope was then thirty-two thousand strong, Reno and Reynolds not having yet arrived. Jackson recrossed the river two days later, and was soon joined by Lee. The losses in the battle of the ninth are placed at two thousand killed and wounded Federal, and one thousand three hundred and fourteen Confederate troops. Pope's head-quarters were advanced to Mitchell's Station, and so was the telegraph. Pope retired across the Rappahannock, on the approach of Lee, and, except a dash by Stuart, succeeded in keeping Lee at bay at the fords of that river from the seventeenth to the twenty-fifth. Jackson and Ewell, however, about the twenty-fifth, crossed well up the river, and, moving through Thoroughfare Gap, surprised Pope by striking his communications at Bristow Station and Manassas Junction. This surprise would not have occurred there had the Gap line been in operation. Comte de Paris, in his history, says : "Jackson, in haste

above all to destroy the Orange Railroad, had marched directly upon that point of line nearest to Gainesville. At eight o'clock in the evening (August 26), the telegraph, connecting Washington with General Pope's head-quarters, became suddenly silent. It was thus that he learned of the presence of the enemy in his rear. Stuart had just reached Bristow Station, where he cut the wires and seized two empty trains, which he threw off the track."

The severance of the wires occasioned much solicitude in Washington, where it was even feared that Lee had planted his army in the rear of Pope's. When friends are known to be on the ocean during the progress of a terrific storm, anxiety, that tender balance between hope and fear, strains the nerves and exhausts all sources of hope. As reports confuse the names of wrecked vessels and so multiply disaster, solicitude becomes positively distressing. So it was at the capital when Pope's protecting army was cut off. The grape-vine telegraph was in full operation, and it brought only bad news. That line is never down. It is operated by the devil, and in war times does a great business. Between protecting Washington, to which mission McClellan was appointed, and rescuing Pope, an additional duty, it is claimed by the friends of the latter, that he was largely left "to get out of his scrape" as best he could. Only one thing possible was now wanting to enable McClellan and Pope effectively to co-operate. That one lack was a telegraph from Bealeton Station, on the O. & A. road, to Fredericksburg. Major Eckert had, however, already ordered L. D. McCandless and a party of negroes to build such a line, and operators J. L. Cherry, Theodore Moreland and perhaps, also, John D. Tinney, accompanied the builders, to render such aid as they might, but especially to operate the line as far as built, so that Pope's messages might be sent by the Fredericksburg route. This line was delayed, owing to the difficulties of procuring poles, but was completed to Morrisville, twelve miles from Fredericksburg, on on the twenty-seventh. When Pope got too far east to use this wire, Cherry rode to Warrenton Junction to ascertain the state of affairs. On the thirtieth, this line was abandoned, but it was over it that Porter's discouraging reports or letters were sent to Burnside at the Lacey House, Fredericksburg, and, in part, at

least, by the latter forwarded to that cave of gloom, Washington.

It was while at Morrisville that some escaping soldiers reported, as runaway soldiers always do, that the army had been destroyed. This stampeded the builders and guards. It is said that McCandless' negroes loaded a large quantity of ammunition, found near Morrisville, and took it safely to Fredericksburg, where it was used in destroying Government ovens. It was not long that Burnside was permitted to remain at Fredericksburg. C. H. Lithgow, operator, chanced to be one of the latest to leave the city, and, rushing upon the bridge to cross, his feet stuck to the tar that had been liberally placed over the flooring of the bridge, when his momentum sent him sprawling in the pitch and dust, to the hearty enjoyment of the soldiers who saw it; to the ruination of his good clothes, and impairment of his temper. In Pope's front, about Rappahannock Station, the enemy was quite active. J. H. Nichols came out from the War Department office to assist McCaine and others at head-quarters, and joined them at Culpeper C. H., as they were about leaving for the Rappahannock, where a stand was made and an office opened; but the enemy's fire from across the river shelled out the operators. Several fragments had struck their building before they left. The army moved back, McCaine going with Pope, and Nichols and other operators coming up with the rear.

Supported by Reno, Pope's available forces, after his considerable losses at Cedar Mountain and at the ford of the Rappahannock, numbered over forty thousand. To these were added ten thousand under Heintzelman, about Warrenton Junction, and Porter's corps, eight thousand five hundred strong, the latter coming up to Bealeton from Falmouth about the time McCandless' builders left the latter place, constructing the Bealeton line. Troops were concentrated at Gainesville and vicinity, and others under Hooker beat Ewell back from Kettle Run when Jackson retired through Centreville. Pope, hoping to "bag" Jackson's "whole crowd," ordered up all his forces for warm work. Rickett's division vainly endeavored to stay the advance of Confederate Longstreet's relieving forces. Pope's troops were considerably scattered from Centreville, *via* Manassas Junction, to Gainesville. Longstreet was coming through Thoroughfare Gap,

forcing back Ricketts. Every moment's delay enhanced Jackson's chances. Pope, appreciating the importance of the hour, ordered a general attack. Porter utterly failed to put his corps into the action, which lasted until late in the evening. Longstreet came up, and then Pope's opportunity seems to have passed forever. That was the battle of Groveton, midway between Gainesville and Centreville. It began at five, A. M., of the twenty-ninth, and ended at nine, P. M. The losses on either side are estimated at about seven thousand killed and wounded. The next day came the climax of the campaign. It was the second Bull Run fight. Like that of the preceding day, there were times when victory and defeat alternated in the balance, but late at night, neither side being eminently successful, Pope retired to Centreville. There he met Franklin's corps, and Sumner's was an hour in the rear.

In the sixteen days' fighting that Pope's army, or parts of it, were engaged in, such were his losses that, with Franklin's and Sumner's corps of McClellan's army, near twenty thousand, Pope now had scarce sixty thousand left. On the twenty-eighth, Pope reached Manassas Junction, and was at Centreville the twenty-ninth, when Groveton was fought, and at Bull Run on the thirtieth. On arriving at Manassas Junction, he sent operator McCaine up the railroad to see if the telegraph was in working order to Bull Run bridge. Accompanied by a small cavalry escort, McCaine accomplished his mission, but returning, the clear waters of Pogues Run, which for quite a distance from the bridge runs parallel with the railway, tempted him to dismiss his escort and take a bath. So tying his horse and thoughtlessly throwing his linen duster over the blue coat he wore, he plunged in. Shortly, three C. S. cavalrymen appeared before him. These he had descried in the distance, but they looked so rough and dirty that he thought them negroes. On espying McCaine, "What's this?" said one to another. "What's what?" rejoined the operator. "What do you belong to?" responded the first speaker. "To Virginia," replied McCaine. "To what Virginia; the first?" asked the rebel. "Yes," answered McCaine. "Well, we thought it looked queer," said the rebel, glancing at the operator's horse and clothing. It was well that the duster covered the coat and brass buttons, but it was infin-

itely better that the trooper thought he had met McCaine before, and, being satisfied, they rode on. But no sooner had they passed from view than McCaine, longing for his escort, hurried to overtake it.

At noon of the thirtieth, McCaine, with three orderlies, left Pope on the battle field of Bull Run, taking the road leading from Sudley Church to Manassas Junction. About five, P. M., they started to return. Riding about four miles, they met stragglers who reported that Pope could not be reached, as the enemy had driven him back and got between him and Manassas. Incredulous, McCaine pressed on, taking the precaution, however, to keep one orderly about fifty yards in advance. A mile further, this orderly came suddenly upon a rebel cavalryman who had a Federal prisoner. The orderly drew his revolver on the Confederate and demanded his saber, which was sullenly surrendered. Some hundred yards ahead could be seen a line of Stuart's cavalry, stretching along the crest of a hill. McCaine's party took their prisoner to Colonel Batchelder, provost-marshal, by another route. Again McCaine escaped, doubtless because the enemy beyond mistook his colors.

We have seen that after Stuart cut the wires at Bristow Station he started for Manassas Junction. Shortly before this, D. B. Tomlinson was relieved from duty and ordered to Burkes to assist J. A. Flagg, who, such was the scarcity of operators, had been on duty twenty-two hours per day for fifteen days. Instead of awaiting a train at Manassas Junction, Tomlinson boarded one going in the opposite direction, with a view of returning by the first passing train, on which he would go to Burkes. The engine "Secretary" headed the first train for Alexandria, and in it young Tomlinson was sitting on arrival at Bristow Station, when a heavy fire was opened on the train and Tomlinson shot in the knee. The following telegram of August 26, conveying the first news received in Washington that the enemy was on Pope's communications, indicates the danger Tomlinson was in :

To Gen. Haupt:

No. 6 train, engine "Secretary," was fired into by a party of Secesh cavalry, some say about five hundred strong. Ties were

piled on track, but engineer took good run at them and scattered them from track. Engine well riddled by bullets.

(Signed) McCrickett.

M. J. McCrickett was at that time train despatcher on the O. & A. R. R. and his office was at Alexandria depot. At another time we will note his services and misfortunes.

It was not long before the enemy appeared at Manassas Junction, which was well filled with supplies and nearly emptied of troops, only about three hundred being there. Of course these were soon overpowered. Fred Fox betook himself to the quarters of the post commissary, Captain Musser, where he was captured and paroled. W. H. Sheffler, on duty at the time, escaped on an engine, after sending word to Alexandria as shown in the subjoined dispatch :

August 26, 1862.

General Halleck:

Operator at Manassas says, "I am off now, sure." I directed the agent to run the two engines at Manassas forward, wait until the last moment and then escape on the engine, if a real necessity existed. Operator had just commenced message to head-quarters of General Pope when wire was cut. It is clear now that the railroad can be relied upon only for supplies. No more troops can be forwarded. * * * * * (Signed) H. Haupt.

But two offices were now open out of Alexandria : Burkes and Fairfax stations ; Waterhouse and Graham, operators at Fairfax, and Flagg, at Burkes. Among the officials at Washington it was as yet only believed to be a cavalry raid, although graver fears were expressed. During the night, the Fairfax operators reported definitely the capture of Manassas and that the enemy was scouting the country. General Taylor's four New Jersey regiments were sent out from Alexandria in cars the twenty-seventh, and defeated at Manassas Junction. Two operators accompanied Taylor. Colonel Scammon failed to hold the Bull Run bridge, although he had two regiments ; these also had previously been beaten off from Manassas. When reports of these things were telegraphed from Fairfax, the officials also became alarmed, and every despatch indicated solicitude. Railroad reconnoissances, with and without troops, were now made,

always attended by operators. M. J. McCrickett, W. H. Sheffler, H. L. Smith and others were engaged in this perilous telegraphic service. After telegraphing the report that "Scammon is retreating and Bull Run bridge gone," operators Waterhouse and Graham also started for Burkes. It was well, for Flagg had been on continuous duty fifty-seven hours. McCrickett reported from Burkes, "I can not get to Fairfax; was fired into one and a half or two miles west of here by cavalry or a band of guerrillas."

The mystery grew greater and greater in Washington. Even Scammon's force was lost to view. Another railroad reconnoissance was ordered, skirmishers put on board and conductor Strein instructed, "If no enemy be found when Bull Run is reached and the bridge is safe, proceed to Manassas and ascertain the condition of property. Report every observation of importance by telegraph. An operator will be sent." Colonel Scammon's force was found retreating and brought in with news that the rebels were in large force. Another party of "two hundred sharpshooters, with operators and wire to repair the telegraph, make communication and report observations" was sent out. Pohick Bridge, one mile west of Burkes had been destroyed, but was quickly restored, when the train, under J. J. Moore, proceeded, the operator repairing the line as it advanced. It reached Fairfax Station where wounded soldiers were found and placed in the cars. This station was a two-story building. The office was up-stairs. Below, the surgeons were busy amputating limbs. The enemy was now reported twenty thousand strong. Anxiety intensified in Washington. The operators and the trains were recalled. Then came the news that Pope was at Manassas. The next day operators reported him at Centreville, and McDowell and Sigel moving to cut off the enemy. Fairfax Station was re-opened, and Pope sent orderlies to that office to deliver messages.

Thus, under the most trying circumstances, the telegraph, working in concert with the railroad, dispels many a hope and excites many fears, but the fears are well grounded. General Haupt, in testifying before the Committee on the Conduct of the War, said: "I can not speak in too strong terms of commendation of the zeal and courage of the railway employés and of the tel-

egraph operators, who, with a full understanding that the service was very hazardous, volunteered for the occasion. The operators requested that I would obtain permission of Colonel Stager, so that, if captured or shot, they or their representatives would not be deprived of pay in consequence of going without leave. The permission asked was promptly granted, and they proceeded, with instructions to conceal themselves in the bushes, send out scouts, make connection with their wire, and report all that they saw or heard. Nearly all the information given to the Department (War) at Washington, for the remaining days of the fight, was received through this channel." If General Haupt, by "this channel," meant this particular line, he was substantially correct. But the Fredericksburg wire was also much relied on.

Moreover, there were two operators with the army itself, who were alive to the importance of obtaining and telegraphing information. These were J. H. Nichols and Ed. Conway. Nichols, mounted on Joe Pierce's sorrel horse, met Conway astride of an old blind mare, at Warrenton Junction. These knights of the key traveled toward Manassas, when, hearing firing to their left, they turned in the direction thereof, not knowing whether they were going toward their own or the rebel troops, but as they came upon the battle ground of Bull Run, they met Federals, and had a magnificent view of the fight for a couple of hours, at the end of which time they returned to the railroad at Fairfax Station, where operator Rosewater was working with the War Department office. Conway and Nichols at once telegraphed to Secretary Stanton an account of the battle as they saw it, and the disposition of the Union troops. It was the first authentic and connected report received in Washington for a day or two, and in return the boys were complimented as follows:

WASHINGTON, D. C.

TO NICHOLS AND CONWAY:

I have mentioned your valuable services to the President, and am assured by him that they are fully appreciated.

(Signed) EDWIN M. STANTON, *Sec. of War.*

Elated by such commendation, Conway remounted his blind nag, and Nichols his sorrel. The sorrel was a hard rider, moving something like machinery when every other cog is broken.

Nichols was sure of being jounced, but whether it would come with a full breath, and thus force exhalation, or on empty lungs and prevent inhalation, he knew not—only knew it was coming till it had come, and then it was most time for another. The sound of distant guns was their only guide, and as that came from far separate points, it was an uncertain one. Darkness came before the operators had gained their bearings, and all night long they kept going, avoiding the camp fires, their main reliance in the late hours, and the pickets, lest they prove to be Confederate. About six, A. M., they neared Fairfax C. H., and were captured by a German picket to whom they could not give the countersign, but a superior Federal officer, being convinced of their position, let them pass on. It was a night and a ride long to be remembered. Conway's blind mare lost confidence in her rider, and felt her own way, his spurs to the contrary notwithstanding. There came a time when Conway lost confidence in the mare, as we shall soon observe. It was a marvel that they could ride all night without more serious incidents than running into trees, brush, fences, etc., for there was an almost continual firing before, behind and to the right and left of them. Even a band of the enemy's cavalry somehow got around near Centreville, and burned a wagon train.

The operators gathered such information as they could, and again started for Fairfax Station. Just before nearing the depot, they came to a muddy little stream. The cog horse, by way of a parting reminder, made a running jump and landed on the other side high and dry, but Nichols, who had left his breath way behind, had to stop to catch it again. When he did respire, he thought his head had settled below his shoulders, and the rest of him in proportion. It was now Conway's turn. His poor beast was fagged, but somehow she knew when to jump. She did jump, alighting in the very middle of the murky, muddy creek, from which she was unable to extricate herself; nor could Conway and Nichols release her. The enemy was already near at hand. It was most six, P. M., and so poor "Sal" was left where she made her last leap. Conway, whose linen duster was well splashed, reached land muddier and wetter than before. Barely had these operators telegraphed their information, when the Confederates were seen approaching. Then the depot was fired, and

LIBRARY OF THE UNIVERSITY

the last train pulled away. The operators at this station had been ordered to remain as long as possible, hence it was not until the enemy came in view that the match was applied, and thus Conway and Nichols easily escaped. This train also took Flagg from Burkes Station. Rosewater, who also boarded it, had left his baggage to the watchful care of the enemy about Manassas. That enemy, clad in carpetings, quiltings, blanket cloth, anything, everything, even to tarpaulin goods, knew well the utility of such clothing as Rosewater was accustomed to adorn his person with.

The line of communication, *via* Fredericksburg and Acquia, we have said, was much depended on, but Acquia was abandoned soon after Fredericksburg. McClellan landed at Acquia the twenty-fourth, proceeding to Alexandria on the twenty-sixth. From Acquia and Alexandria, McClellan carried on by telegraph another historic correspondence with Halleck and the President. It was well said by Colonel Stager in an annual report that "even the history of this fratricidal strife was being recorded by telegraphic dottings." Any one reading the telegrams to and from the great officers in Washington and vicinity, during the trying period of Pope's eventful campaign, will discover in them not only sources from which history is compiled, but also in the tone or language of those epigrammatic epistles, a sort of photograph of passing events, always real, sometimes sadly so. They were not interviews for the public, but cipher interchanges which sprang from the sincerest convictions and expressed, oftimes, without reserve. Once stated, they were beyond recall or dispute. It was such evidence that went far to convict Fitz John Porter of disobedience at Groveton, and it is from such dispatches that General McClellan's support or neglect of Pope is judged. Modern history can not be severely distorted. There are some exact sciences. History has been far removed from them, but so far as the telegraph records events, that far will science exactly preserve the truth. Perhaps the best history of the late war would be the telegrams, properly arranged, aided by parenthetical explanations, from which opinions and criticisms might wholesomely be excluded.

But while we are philosophizing, Pope is engaged at Chantilly—the last of his memorable battles. It is September 1, and

that same Jackson takes the initiative. He moves to flank the Federal right. Reno and Stevens, Hooker, McDowell and Kearney, become engaged. The conflict lasts until dark, when Federal General Birney, succeeding Kearney, was left to bury those who died that day. To the gloom which the cold rain produced, which the darkness intensified on that field of misery, was added the death of gallant Kearney and talented and brave Stevens.

It is said that, in the operations from Cedar Mountain to Chantilly inclusive, the Confederates lost fifteen thousand men, killed and wounded, and the Federals near twice that number, killed, wounded and captured.

Pope, from Fairfax C. H., sends to Fairfax Station a message for Halleck: "My head-quarters are in Alexandria," and ere night of the second, the Union army is once more within the thirty forts and other defenses of Washington. What humiliation! But how much greater, had any other than an American army compelled it!

Now, as in the Summer of 1861, the Military Telegraph, except about Winchester and Harpers Ferry, had no foothold in Virginia north of Yorktown. Now, as then, offices were opened throughout the District defenses, and now, as then, it is the Federal capital that is defended.

At Chantilly, Lee writes President Davis that he will invade Maryland. In Washington, Pope resigns his command, and goes into the Indian country. McClellan is again solicited to command what is once more known only as the Army and Department of the Potomac, and while he is preparing for action, the American and Western Union Telegraph lines spread the news and details of victory and defeat throughout the land. It was well, because President Lincoln had recently called for three hundred thousand more troops. Those telegraphic reports filled the quotas.

Two great purposes were sought to be subserved by Lee's northward march, which began September 2, 1862, viz., (1) to carry the war into the Union States, and (2) thereby obtain a new and powerful argument for foreign mediation, or at least, recognition. England and France, especially the latter, seri-

ously contemplated measures looking to the permanent establishment of the Confederacy. It was also thought by the Southern authorities, that many recruits could be obtained in Maryland, and by threatening Union cities, especially Philadelphia, Baltimore and the capital, and throwing the ravages of the war upon Unionists, the triumph of the cause would be well nigh assured. When Lee determined upon this move, he directed several divisions that had remained in Richmond, to join him in Maryland, and, passing Leesburg, he crossed the Potomac in the vicinity of Point of Rocks. Stuart's cavalry reached Frederick, Md., on the sixth.

In a former chapter, we have shown the construction, in 1861, of a line from Washington, D. C., to Hagerstown, Md., *via* Rockville, Darnestown, Poolsville, Hyattstown, Frederick and Williamsport; also a loop from Poolsville to Point of Rocks. In the new turn of fortune's wheel, each of these places was now destined, in its order, to be "the front," the *situs* of operations, and the post of observation. Notwithstanding McClellan was re-invested with the command of the troops on the second, that those troops were in a *semi*-disorganized condition, owing to recent removals from the James, and to marches and conflicts under Pope, he (McClellan), on the third, began crossing troops into Maryland to forestall any attempt upon Baltimore, or on the capital, from the north or east.

It was unfortunate that the necessities of the telegraph service on the Peninsula, and with Pope, drew so many operators from the Frederick line, as it occasioned the closing of several offices, which were supposed to have become unimportant. There was no military operator at Point of Rocks, at the time of Lee's forward movement from Chantilly, and Stuart's approach seems not to have been telegraphed. Great uncertainty prevailed in Washington for many days after (third) it was known that some of Lee's forces had crossed the river. Apprehensions were serious, of Lee's aiming to draw McClellan away toward Frederick, while the main Confederate force swept down upon Washington, *via* Leesburg. Hence it was long regarded essential to divide the Union army, by sending McClellan, with eighty-seven thousand five hundred men after what was presumed to be Lee's main force, while full seventy thousand

were retained in the defenses of Washington. This necessitated a continuance of a full siege telegraphic force in and about the capital, but owing to the evacuation of the Peninsula, and the abandonment of Pope's lines, there were at this time plenty of telegraphers for all needed points. Of course, Stuart's first business was, to cut the telegraph. Thus, direct communication with Harpers Ferry, *via* Point of Rocks, was severed. At this time, Dixon S. Miles, colonel in the regular army, was in command of Harpers Ferry and its contiguous defenses, and with him were, say, nine thousand troops. William J. Dealey, George J. Lawrence and Cephus C. Starling were the military operators at that point, and Daniel J. Ludwig the railroad operator.

Winchester was now the farthest point in Virginia occupied by the Federals. Operators Charles H. Lounsberry and J. D. Tyler were there serving Julius White, a brigadier general of volunteers, in command. General Halleck telegraphed White, September 2, *via* Wheeling and the Ferry, "You will immediately abandon the fortifications at Winchester, moving the heavy guns, under escort, by rail to Harpers Ferry. If this can not be done, they should be rendered unserviceable. Having sent off your artillery, you will withdraw your whole force to Harpers Ferry." General White re-inforced Miles with two thousand men and was at once ordered to Martinsburg, to the end that Miles, a soldier for forty years, might not be superseded in command. Soon after, the enemy were reported from Leesburg, Winchester and Hagerstown, Maryland, and consequently White was ordered to evacuate Martinsburg and go to Harpers Ferry with his two thousand, five hundred more troops. Jackson crossed the Potomac on the eleventh, and on the same day White started, reaching the Ferry the twelfth, when Miles exhibited the following telegram:

WASHINGTON, D. C., Sept. 7, 1862.

COLONEL MILES, Harpers Ferry:

Our army (McClellan's) is in motion. It is important that Harpers Ferry be held to the latest moment. The Government has the utmost confidence in you and is ready to give you full credit for the defense it expects you to make.

(Signed) H. W. HALLECK, *Gen.-in-Chief.*

White very properly permitted Miles to remain in command, and a Congressional investigating committee and some of the highest military authority in this country have since approved thereof.

On the seventh, McClellan left for Rockville, where L. A. Rose was operating. McClellan's operators at this time were A. H. Caldwell, Jesse H. Bunnell, John W. Parsons and J. L. Cherry, who were soon reinforced by J. H. Emerick and C. H. Lithgow. Caldwell, Bunnell and Emerick continued with McClellan, and the others advanced with various commands. While McClellan was at Rockville and his cavalry out on the Poolesville and Hyattstown roads, it was thought possible, barely possible, to open telegraphic communication with Point of Rocks and thence to Harpers Ferry. L. D. McCandless had charge of the line repairers and builders on this route, and together with operator "Connolly" (doubtless a mistake for Ed Conway) volunteered to attempt it. Taking two cavalrymen, they proceeded as rapidly as practicable and reached Point of Rocks in safety, but there was no circuit from Washington. McCandless immediately started back, following the route of the line, meeting many stragglers from the rebel army, two parties of whom he directed on the Poolesville road, where they were doubtless captured. In a corn field on a bank of the Monocacy, where the wire crossed the creek, after being cut it had been ingeniously fastened, one end to a stump and the other to a fence post, giving quite an appearance of being intact, but hidden by the fence, when in fact a piece of wire had been carried away. But for being misled by some skillful rebel, McCandless and Conway would have won great credit. As it was, the break in the line delayed perfecting the circuit until all the glory had passed. The adventure was a daring one as it was a move very close upon the rebel rear, but it was much less successful than it ought to have been, probably owing somewhat to too rapid riding.

McClellan remained at Rockville, or near, for three days, frequently communicating with Halleck by cipher telegrams, eighteen of which are published in the report of the committee on the conduct of the war. These are exclusive of replies thereto and telegrams to the President, to Banks the com-

mander in Washington, to General Wool, commanding a department with head-quarters in Baltimore, and Governor Curtin of Pennsylvania. From here also McClellan's subordinates arranged largely by telegraph for supplies of all kinds. Reinforcements were requested and forwarded, including Porter's corps, twenty-one thousand. McClellan now had one hundred and ten thousand, the enemy probably less than sixty thousand. Reports were here received from advance offices as to operations in front, and as rapidly as received were forwarded to the War Department, and then, if proper, given to the general public, which was watching the operations of these two great armies with bated breath. There were thousands of fathers and mothers, of wives and children, throughout the North, unable to attend to their usual tasks, owing to their overpowering solicitude. The news that came from near Newmarket, to the east of the enemy, from Hagerstown, to the north, or Harpers Ferry, to the west, was tinged, as was natural, with melancholy, owing to the absence of a competent repelling force. The day Martinsburg was evacuated, Harpers Ferry became as silent as the grave until the afternoon of the thirteenth; then McClellan was at Frederick and his army ahead. The news of the thirteenth was merely the sound of cannon in the direction of Harpers Ferry. It meant that the order of march directed by Lee, a copy of which had fallen into McClellan's hands and which provided for the capture of that place, was genuine and in process of execution. More activity now prevailed in the army. The next day a courier from Miles reached McClellan with intelligence that the enemy held Maryland Heights, but that Miles still held Loudon and Bolivar Heights and hoped to hold out two days. Miles' cavalry (two thousand) had escaped.

Operator Ludwig boarded with a Mrs. Chambers, whose son Marshall was in the rebel army. Marshall obtained a "leave of absence" and entered Harpers Ferry about the tenth and remained for a day or two, and was seen no more until the fifteenth. A rebel operator was discovered on the line, but of course obtained no news. He told Dealey he was coming soon to see him and the others, but though he doubtless came he did not send up his card. After a few days cannonading, Miles surrendered, and before the fog had sufficiently raised to disclose

to those of the enemy now occupying Loudon Heights, the white flags of the Federals, a shell burst and killed him. In this disgraceful surrender to Jackson, who commanded the two thirds of the rebel army sent to effect it, operators Dealey, Ludwig, Starling, Lounsberry and Tyler were among the prisoners of war. But the military telegraph instruments and apparatus had previously been destroyed by the telegraphers. All other Government property at the Ferry was intact. At the head of Jackson's troops to possess Harpers Ferry came Marshall Chambers, probably a counterpart of the Confederate States officer Rousser, whom Miles permitted to leave Harpers Ferry only a few days before, and who also headed the victorious host.

By this time Franklin's corps of McClellan's army was within five miles of the Ferry. The cessation of artillery firing, by a negative pregnant produced to the relieving forces, conviction of disaster. In that ominous silence, a most appropriate messenger, was carried the first tidings of defeat. This has been mentioned by some as a counterpart to Fort Donelson in the west, but it is not our province to draw comparisons.

By this time (fifteenth) South Mountain had been fought. There were times when President Lincoln regularly attended the the War Department telegraph office. Indeed, between Major Eckert's and Secretary Stanton's offices was a little office that was generally known as the President's room. To it he betook himself regularly at six o'clock every morning and there he read the news of the night previous; there also he often consulted with Stanton and with Halleck and other eminent military men; but in times like these when a nation was on tip-toe, Lincoln manifested his own anxiety, by long protracted and frequent visits to that little room. There operators Chandler, Tinker and Bates, who were chiefly occupied translating and "putting up" cipher messages, also had desks. It was the *sanctum sanctorum* of that great military and civic center, and in it, all phases of the life of the chief military and civil functionary of the land were made manifest. Patiently but wistfully, he, at times of greatest anxiety, looks over the shoulders of the cipherer as the message is gradually unfolding. About noon of the fifteenth, one of those babel telegrams is received. As it unwinds, evidences of a great battle are seen in the two or three

connecting words of adjoining columns. A little later, success is also clear, but in its full development, are some of the details of that triumph which is found summed in a terse sentence, brimful of glad tidings. "It has been a glorious victory." That was South Mountain. Now a word concerning it.

There are two gaps in this range to which the army moved from Frederick; one, near Middletown called Turners Gap and the other close to Burkettsville, known as Crampton's. Lee posted but few troops in these strongholds, not anticipating vigorous pursuit in force, but as the attacking columns multiplied, the defenders were reinforced until they numbered nearly all of Lee's army not operating about the Ferry. The conflict raged until late at night. At 9:40 P.M., a Union victory was certain at both Gaps, and then it was that McClellan wrote that telegram which as we have seen, announced success. This message was delayed by reason of the telegraph instrument becoming out of order, which necessitated Emerick's riding to Frederick for another. By two o'clock on the fifteenth the news-boys throughout the land were shouting "'ere's yer extra; all about Lee whipt." The sacrifice in scaling the mountains and driving the enemy through the defiles was four hundred and forty-three killed and one thousand, eight hundred and six wounded, including brave Reno, dead. The cost of the defense was probably not so great except in prisoners, of whom about fifteen hundred were taken.

Thus was Lee's purpose to invade Pennsylvania temporarily thwarted, notwithstanding an advance to Hagerstown and thus it was, that Franklin was enabled to reach a point within five miles of Harpers Ferry when the surrender occurred. Lee's peril was now exceedingly great; wherefore he sent for Jackson to make haste to meet him near Sharpsburg. Unfortunately the Federal prisoners allowed themselves to be paroled, thus leaving the entire force of the enemy to rejoin Lee, but it was fortunate for the operators who mixed with the Union soldiers that were paroled by regiments, and therefore the telegraphers were not prevented from immediately re-entering the service. They all met in the office at Frederick, where Ceph Starling probably awoke his muse, and the guitar which he always carried with him. At the Ferry he had been accustomed to remind his friends of scenes of home, by his guitar and verse, which

were all the sweeter because surrounded by nothing peaceful, quiet or homelike.

The great question now was, could McClellan strike Lee before his army was re-united. Between the Potomac and the Antietam, a quiet, deep creek near Sharpsburg, Lee had prepared to repel the Federals until Jackson, McLaws, Anderson and A. P. Hill could come up from the Ferry. That question was in process of solution, each department looking to its own duties. The telegraph office which the operators opened near South Mountain after witnessing the battle and as soon as the line was brought on the fourteenth, was, on the fifteenth, advanced to near Boonesboro where the operators were surrounded by wounded men who were brought from the South Mountain battle field. The moans of the sufferers were telegraphed to Washington and the North, and soon came officers of the Sanitary and Christian Commissions, those grand sanitaria, with lint and bandages and cordials and medicines and prepared foods. The telegraph moved on to Boonesboro, and there also soon came W. J. Dealey and J. D. Tyler, operators from the Ferry, escorted by the Garibaldi Guards, the latter under parole, and there Dealey and Tyler were located and the line was extended three miles to Keedysville, just in the rear of McClellan's camp.

On the sixteenth, the public was astounded at the news of the fall of Harpers Ferry. South Mountain was counteracted. The *morälé* of the Confederates behind the Antietam was recruiting in the cheers that smote the air. McClellan was thereabouts, locating his forces and while so doing Hagerstown was connected by telegraph. This gave McClellan a northern route *via* Chambersburg, Pennsylvania. Supplies were rushed down the Chambersburg & Hagerstown railroad for the army. On the fifteenth, considerable skirmishing for position occurred. On the sixteenth, McClellan's forces were not yet well up. Time was precious. Two divisions of Jackson's own exhausted troops were in position, but yet McLaws, Anderson and A. P. Hill were behind. Fighting was heavier but not general, merely, but severely, tentative. All felt that the morrow must bring on a crisis. It was so, notwithstanding McClellan's whole force was not up; yet, they far exceeded Lee's in hand.

In that struggle of the seventeenth, was thought to be cast

on the one side, the gateways to Pennsylvania and Baltimore at least, besides Washington. The stake was even larger, for it comprehended the Federal army of the East and food, shelter and clothing for the Confederates, who were in rags and wretchedness. It meant Confederate recruits in large numbers. It meant foreign recognition. If it presaged a divided country, who can count the consequences except to the slave. It meant nearly valueless greenbacks, loss of prestige, chilled hopes, destroyed railways and bridges, confusion, martial law, and the thousand evils that fall to the lot of the great vanquished to be harvested by the victor. How countless are the spoils of war and how it feeds on injuries. On the other hand was thought to be wagered the death knell of the Confederacy ; a rehabilitation of the States and a return of peace and plenty and of home and quiet joy. A saving and an uplifting of a nation in a day.

As the fog lifted, the great guns spoke. Then away over to the right, across the creek, Hooker's infantry moved upon the enemy. The work of battle was well begun early. The forces of Doubleday, Meade, Ricketts, Mansfield, Hartsuff, Williams, Greene, Crawford, Gordon, Sumner, and other corps, division or brigade commanders, were soon heavily involved on the side of the Federals, with Jackson's, Lawton's, Trimble's Starke's, Jones', Hood's, and others, of the Confederates. New batteries and fresh supports were being gradually, but surely, drawn into the struggle. Union Generals Sedgwick, Richardson and French hurled their masses against the foe, and a Federal triumph seemed assured. Dunker Church had been taken, and re-taken, and the woods and fields thereabouts were strewn with dead and dying. The flying enemy are reinforced. McLaws and Walker have arrived from Harpers Ferry, and, rushing into the breach, the Union troops are forced back again. Ewell also assists, but his force is more than counterbalanced by Franklin's, of McClellan's command. Still, the chances are with the Northern soldiers. It was about this time that McClellan wrote the following telegram, dated 1: 20 P.M., seventeenth, to General Halleck :

Please take military possession of the Chambersburg & Hagerstown Railroad, that our ammunition and supplies may be hurried up without delay. We are in the midst of the most terrible battle of the war—perhaps, of history. Thus far it looks well, but I have

great odds against me. Hurry up all the troops possible. Our loss has been terrible, but we have gained much ground. I have thrown the mass of the army on the left bank. Burnside is now attacking the right. I hold my small reserve, consisting of Porter's Fifth Corps, ready to attack the center as soon as the flank movements are developed. I hope that God will give us a glorious victory.

It was one, P. M., when Burnside secured a crossing, and at three, he stampeded the small force in his front. Now, again, victory seems certain, but it is snatched away by the sudden arrival and appearance of A. P. Hill's troops, which fall upon the left flank of Burnside's corps. The climax has come and gone, and neither side is complete master. Both have been torn and shattered. It is while the tide of battle ebbs and the evening mist comes to spread its mantle over the scene, that McClellan, thinking more of the morrow than of to-day—more of eventual success than present misery, pens another message, this time for the Chief of Ordnance, in Washington, saying:

If you can possibly do it, force some twenty-pound Parrott ammunition through to-night, *via* Hagerstown and Chambersburg, to use near Sharpsburg, Md.

Think of it—time and space ignored in this greatest of human exigencies! What will not the railroad and telegraph do? What a courier! what a carrier! that ammunition, hundreds of miles away, may, at the close of one day's fight, be ordered and on the morrow received in time to open anew the battle in which a nation is the stake.

But it was not renewed, and each side attended to the dead and wounded. One pauses to think of that dreadful scene, before writing the sum total of misery, just as one reading of it stops to comprehend its fearful magnitude. Twenty thousand and twenty-six men had been shot there that day; thirty-six hundred of them killed, of whom two thousand and ten were Federal soldiers. Of the wounded, the Union men lost nine thousand, four hundred and sixteen, to the Confederates about seven thousand. So much for a conflict of ideas. The war correspondents found it impossible to get their long reports off by telegraph, so heavily were the telegraphers occupied with weightier matters, but telegrams, short and decisive, announced gen-

eral results and particular casualties. Messages came pouring into camp from all parts of the North, without end, and nearly all bore the same substantial inquiry: "How is my son," "my brother," "my husband," or "my father?" Even weeks afterwards, these anxious inquiries came over the wires, sometimes addressed to the party himself. Perhaps he was dead, perhaps wounded, and removed—no one knew to what hospital; then would come another to his captain, to his colonel, and not infrequently to the general of the army. The words, by this time, were most appealing. The very tears of a mother or wife might be seen in the language of the inquiry. It was in this humane work that the operators exhausted their strength, which was only revived in snatches of fitful sleep, on the ground, or office floor. Caldwell, Bunnell and Emerick, at McClellan's, were sending orderlies all over the field and all through the camps, seeking answers. How little of what these operators did to secure replies, and of their severe service at the key, was ever known to those most benefited, but the aspersions heaped upon them when their messengers failed, were numerous, and the telegraphers thought unjust, as in the small hours of the night the head nodded, while the hand wrote incoming, complaining office messages.

On the nineteenth, at 10: 30, A. M., McClellan sent this catholiconic telegram:

> Pleasanton is driving the enemy across the river. Our victory was complete. The enemy is driven back into Virginia. Maryland and Pennsylvania are now safe.

That telegram said to the one hundred thousand Pennsylvania militiamen, "Lay aside your arms." It said to the merchants, who closed their houses of business at three, P.M., to drill, "Renew your vocations, as usual." It said to the Maryland refugee, "You may go home." It said to the nation, "Saved;" but it did not mean to say that a death-knell to the Confederacy had been sounded; that the States were to be rehabilitated, and soldiers returned home. That kind of a "complete victory" was not won at Antietam, for, at best, McClellan had not captured over five thousand unwounded prisoners. But there was more in that victory than appeared in reports from the front, for President Lincoln had, as he subsequently said, made a solemn vow before God, that, if

General Lee was driven back from Maryland, he would crown the result by the declaration of freedom to the slaves, and, accordingly, on the fifth day after Lee's defeat, the proclamation was issued. A new phase to the war was thus presented—new hopes, new fears, increased animosities ; but the freedom of four millions of slaves was officially determined upon. Surely, Antietam was a great stake, for in that question of slavery there were sharper issues than in State's rights, or separation. Slavery was the kernel of secession.

Lee slowly moved to Martinsburg and Winchester, after dealing Porter's corps a severe blow near the Potomac, for following so closely. The Army of the Potomac spread out along the river, especially near the fords. September 21, McClellan's quarters and office were moved half a mile west of Sharpsburg, and on the twenty-eighth again moved two and a half miles farther west ; again, to near Knoxville, where the wires, as before, connected Washington, D. C., and Greencastle, Md. October 13, head-quarters were once more moved into Pleasant Valley. Emerick left McClellan's at this point, to open an office at Burnside's quarters, and immediately received a telegram from Washington, offering Burnside the command of the army—an offer which was declined in the expressed belief that McClellan should be retained.

In a day or two Emerick was sent to Couch's head-quarters on Bolivar Heights, relieving Lounsberry, who had remained with the army after his capture. At this time Ed Conway and Charles W. Moore worked the main office at the Ferry. Moore had just been returned from Libby Prison. Thomas Dolan was located at Sharpsburg. A line was built from Hagerstown to Hancock and to Point of Rocks *via* Harpers Ferry, and from the Ferry to General Sumner's quarters, half a mile distant.

October 10, Stuart crossed the Potomac, and with two thousand cavalry raided Chambersburg, cutting the telegraph, and recrossed, having passed around the Union army. October 25, McClellan began crossing into Virginia at Harpers Ferry and Berlin. McClellan made his head-quarters three-quarters of a mile from Berlin during something like a week that the army was crossing. All the supplies were wagoned over at Berlin to Lovettsville, and thence distributed to supply the army until it

could be cared for by the Manassas Gap Railway. Lovettsville lies at the foot of Loudon Heights and is three miles from Berlin. The telegraph into the dominion by this route ended here. A few weeks later the post was abandoned and the line removed. Skirmishing with Lee, especially cavalry encounters, became frequent. November 6, McClellan's army lay near the Manassas Gap Railroad, near Warrenton, and general head-quarters were at Rectortown, the Confederates being mainly in and about Culpeper Court House.

The lines *via* Manassas Junction were already restored. Large reinforcements were arriving from Washington and operations once more indicated decided action. But on the 7th of November McClellan was suddenly and unexpectedly deprived of his command and General Ambrose E. Burnside installed therein. Not to digress and discuss the justice of the order or its wisdom at that particular time, it may be asserted that the army felt his removal as a great wrong to him and a severe blow to the cause. This was no less so among the department operators, especially at head-quarters, for the general held the telegraph and its servitors in high regard. Writing from Warrenton, Virginia, five days later to a comrade, McClellan's chief operator, Caldwell, said :

We are all grieved at McClellan's removal. The whole army, from major generals down to foot orderlies, cried like babies when he left. Old soldiers of the regular army, who have been in the service since he was born, wept like boys. I never saw such a reception as the men gave him when he took leave of them. I hardly think McClellan will have another command soon. He being the ranking major general of the army, it is not thought he will take an inferior command. I had quite a talk with him before he left. He thanked me for the manner in which I had always conducted my duties, and told me if ever he had another command he wished me to feel that I must be with him. He sent me an elegant letter and I am proud of it.

CHAPTER X.

THE TELEGRAPH IN WEST TENNESSEE AND NORTHERN MISSISSIPPI DURING THE LAST HALF OF 1862. — FARMINGTON. — IUKA. — CORINTH. — VAN DORN'S AND FORREST'S RAIDS. — GRANT VERSUS THE U. S. M. T. — CHICKASAW BLUFFS. — ARKANSAS POST.

Upon Colonel Wilson's retirement from the military telegraph service, all telegraphic operations in General Halleck's great department devolved upon Major Smith, who had accompanied the latter to Pittsburg Landing. As Smith's duties required his presence in St. Louis, he made the following appointment:

PITTSBURG, TENN., April 18, 1862.

Mr. Duncan T. Bacon is hereby authorized to take command of the construction party and the working of military lines at Pittsburg, Tenn., and as they may be built hereafter, until further orders. All operators will report to him for orders. Mr. Bacon will report daily to head-quarters telegraph office or to Captain McLean, A. A. General, for orders, and carry out such as he may receive with the utmost promptness. (Signed) GEO. H. SMITH,
Supt. Mil. Tel., Department Mississippi.

J. S. Burlingame was appointed foreman of builders. Bacon caused an office to be opened at Halleck's quarters on the bluffs, and a field line to be erected, connecting various division head-quarters. John C. Sullivan was manager of Halleck's office; Philip Bruner, of General Buell's, was assisted by Lewis B. Spellman. Ira G. Skinner had charge of General Grant's office, having been with him since August 16, 1861, and Wayne H. Parsons managed General Pope's. Pope having succeeded in capturing Island No. Ten, joined Halleck at Shiloh with the major part of his forces, say twenty-five thousand, and by the 30th of April Halleck had a well-appointed army of one hundred

and twenty thousand men, under some of the ablest officers in the country.

Corinth, not Beauregard's army, appears to have been the objective. It was thirty miles away. The Federal advance began on the 30th of April and entered Corinth on the 30th of May, thus averaging one mile per diem. The Confederate forces were far inferior in numbers and organization. All accounts agree that Halleck's caution was unwarranted and prejudicial to the Union cause.

Besides the operators named who took part in this campaign, there were at various head-quarters Frank S. Van Valkenburg, who came with Pope, and Alva S. Hawkins, George Purdon, J. T. Tiffany, Benjamin H. Peebles, C. W. York, Douglass Reid and Mark D. Crain. Field lines at all times connected the several division head-quarters with Halleck's, where L. C. Weir was cipherer. At one time Pope was directed to cause a reconnoissance to be made to Farmington, a small town four miles from Corinth. Solomon Palmer constructed a field telegraph as the troops advanced on the place, and Parsons went as operator. The telegraph party was under the protection of a company of the Third Illinois Cavalry, Captain Smith. No difficulty was experienced in driving the enemy and entering the place. That accomplished, the main force returned, leaving General Buford in command and Parsons to do the operating. At dawn of the next morning, the cavalry pickets reported the Confederates were coming in force, and immediately the battle of Farmington began. General Pope was constantly advised by telegraph of the situation, and Captain Smith of the telegraph guard inquired of Pope if he should remain longer. Pope answered: "Yes; stay there till you see the enemy or are driven out." In five minutes the enemy opened fire with grape and canister, raking the shingles from the roof of the house Parsons used as an office. The dirt flew about when the destructive missiles struck in the front yard. The enemy deployed so as to capture a part of the guard. Parsons then hurriedly telegraphed, "The rebs are right on us," and jerking the instrument from its fastenings placed it in a rear pocket of his coat. Mounting his horse, he plied his spurs for the rear. While thus making the fastest

time unrecorded, a shell ploughed the ground about his horse's feet, with no other effect than to increase the pace.

Parsons soon connected his instrument again and reported to Pope, but within ten minutes shot and shell were falling about him. One shell burst on the ground within ten feet of him, a piece of it tearing the leg from a boot worn by one of the cavalry escort. Again Parsons retreated and again connected his instrument, and was a third time driven off. Ten thousand of Van Dorn and Price's soldiers from the west were pressing a single brigade. Parsons lost his instrument from his pocket, but Captain Smith restored it. On Parsons' arrival at Pope's at four P. M., tired, dusty and hungry, great was his chagrin, because the general discredited his reports from Farmington, and had told the operators that Parsons "was scared and should be placed under arrest," but General Buford convinced Pope that great praise was due Parsons for his gallant services, and Pope himself subsequently commended him therefor. It is not usual in war to require such exposure of civilians, but the military operator was a frequent exception.

While lying in front of Corinth, Halleck's provost marshal issued an order forbidding the landing of any liquors and closing the bars on all steamers on the Tennessee. The operators at Halleck's were puzzled to circumvent the order, believing liquor no worse for them than for the staff. Finally one of the telegraphers called on the marshal and with great *naïveté* remarked parenthetically, that the field lines were nearly useless for want of battery material. The marshal inquired what article they were in need of and was informed of the lack of acid. "By the way," said the operator, "If we had a barrel of alcohol, we might use it as a substitute until supplies arrived from St. Louis." The marshal was very sorry that he had no alcohol; the operator was inwardly struggling to keep his countenance as the marshal, having only the advancement of the service at heart, added, in all seriousness—"But I have several barrels of confiscated whisky and if one of them would be useful in strengthening the battery, it will be sent over at once." The operator drolly allowed that whisky was not so good a substitute as alcohol, but was convinced that if he had a good article,

he could keep the telegraph in operation. Accordingly, the marshal sent over a barrel of his best.

A contraband sunk a hole within the office tent, and the barrel with all due solemnities was placed therein and covered with earth. A small elder stick, with the pith driven out, protruded from the barrel a few inches above the ground. The battery material was tested and the lines worked beautifully (hic). The operator was loud in its praise to the provost marshal. In the afternoon while one of the operators, measured his length on

DRAWING BATTERY MATERIAL.

the ground, drawing battery material, General Halleck unexpectedly entered the tent and being of an inquisitive turn of mind, rendered more acute by the blushes that mantled the cheeks of the operator, he inquired "why so prostrate, young man?" to which the confused operator stammered, "I was drawing battery material, General." Halleck plied the operator with questions until he received the whole story, which he laughed heartily over. Having finished his business he left, with the remark that he should have to see that the marshal was better posted on the requirements of the telegraph. As the story soon leaked out, the quarters became popular and the substitute ebbed away; but for months the marshal's decanter,

labelled "Battery Material," was the solace of sympathizing friends who called to condole with him.

It may seem somewhat remarkable that Confederate operators about Columbus, Kentucky, had successfully adopted the same ruse, as already related, but the acid theory was strangely popular. Major Eckert visited City Point in 1864, on a tour of inspection. On his way, he concluded to send a barrel of whisky and a quantity of quinine to the army for the use of the operators, many of whom were victims of malaria and exposures. But on nearing Jamestown Island, the steamboat captain told him he had a demijohn of acid for H. W. Cowan, operator there. Knowing how hard Cowan fought malaria, Eckert inspected the demijohn and remarked to the captain that it was acid for the electropian battery, and would not be needed, so the steamer was not stopped. George Henderson, John D. Tinney and Edward Conway, operators, on board investigated the article even more closely than the major had done, convincing the latter that he need not send the barrel. It is said that when Major Eckert returned to Washington he very solemnly reported that the operators at the front were found in good spirits.

Corinth was evacuated on the 30th of May, and the Federals took possession. General Williams' house, fronting the park, was selected for telegraph head-quarters. Many of the operators gathered there and related the story of their respective services and hair-breadth escapes, but above all congratulated one another on being that night in Corinth, Mississippi, and in telegraphic communication with Nashville, Tennessee.

The joy which the tidings of the capture of Corinth created in the North was warranted by anticipations, but was not justified by realizations. Buell and Pope, with seventy thousand men, pursued Beauregard a short distance without effect. About the middle of June, Buell was ordered to move with Wood's, McCook's and Crittenden's divisions toward Chattanooga, which he did, repairing the Memphis & Charleston Railroad as he advanced. Thomas and Nelson, with their divisions, followed during the summer. Grant was sent to Memphis; Rosecrans had already arrived from the East and succeeded Pope, who was sent to the Department of the Potomac and most of whose troops were returned to Missouri. We will take up Buell's line of

march in good time, first devoting our attention however, to West Tennessee and Northern Mississippi. After Buell had gotten well under way for Chattanooga, Bragg, who superseded Beauregard, also started therefor, leaving Van Dorn and Price in North Mississippi.

General Halleck, directly after taking Corinth, ordered Lieutenant Colonel McPherson to superintend the repair and operation of the railroads leading to Jackson, Tennessee, and

SMITH'S PRIZE.

Columbus, Kentucky, and from Jackson to Grand Junction, and thence to Memphis. Major Smith, of the Telegraph Corps, was assigned to the task of opening the wires to Cairo and Memphis. "Assigned," is hardly the word, because he anticipated the order in his loyal haste, for scarcely had the enemy left Corinth when Smith and Captain Brackett (the latter in command of a company specially detailed to guard and aid the telegraphers), having heard that the Confederates had unwittingly fired a bridge near Chewalla before the last retreating and heavily laden trains had passed over, hurried to the burned bridge and found six locomotives partially wrecked and their trains badly destroyed. Parts of engines were found in the swamps near by; one of the engineers was captured by Brackett's men and by great industry

and perseverance and search for pieces in the swamps, an engine was repaired, so as to be worked on one side. Its woodwork had been mainly destroyed, and broken and bruised as it was, it presented a sorry appearance, but Smith knew how useful it would be to him. About sundown he burst into Corinth with his prize, which filled the air with its screams, that sounded like melody to the troops. A great shout went forth from thousands of throats. It was not long, however, before an army officer demanded that the engine be turned over to him, but Smith peremptorily refused, telling the officer that there were more where this one came from and he should go there and help himself. A guard however, was about forcibly to eject Smith, when Halleck was appealed to and interference prevented. It was with this one-legged locomotive, that the repairs of the line were hastened.

Some days before any Federal troops had reached the vicinity of Jackson, Tennessee, Smith and a few others, taking a handcar north of the first break in the road, pushed on through that guerrilla country, repairing the line then not much injured, at least as far as Jackson. It was a daring, if not a reckless operation, and Halleck reproved him for it, but then, nobody in war censures another very severely for being too brave, if successful.

However, the line was at once cut again, and John C. Sullivan and O. W. Paxson, operators, were ordered to accompany a part of Colonel Bissell's Illinois Engineer regiment on flat and dump cars by night, to avoid guerrilla parties, while *en route* repairing the line. Six miles out they found a bridge over a creek in flames. Two of the near residents being caught away from home were brought to the bridge ; a court-martial convened and preparations were apparently made, while the trial progressed, for hanging them. After the prisoners had waited an hour for the decision, the court reported that it could not agree upon a judgment, and the prisoners, thoroughly frightened, were released, after which, it is said, that bridge was the constant object of their watchful attentions. The line was opened to Columbus in due time and thence to Cairo *via* Paducah.

Beauregard retired to Okolona, Mississippi, leaving all of West Tennessee an easy conquest, and early in June Union General McClernand's forces moved westward to Bolivar and Mem-

phis, causing, as we have seen, the evacuation of Fort Pillow, above Memphis.

Sullivan, aided by Henry Wilson, William Lane and three other builders, repaired the line from Corinth to Memphis, traveling by hand-car, which was carried or drawn over or around breaks in the railroad. About thirty miles west of Grand Junction they rested over night at a planter's house, where eight rebel cavalry lay fast asleep on the arrival of Sullivan's party, and as the lady of the house did not know which side would finally triumph, she did not apprise either party of the presence of the other, but as the Southerners had first retired, she considerately aroused them before daylight and sent them on their way. Ten days later, as repairers were passing this same place, an unspiked rail was drawn from the track by a wire attached thereto, thus ditching the car and three men, who were made prisoners, and who, after marching some twenty miles, were paroled; but the report of their death had been started. This report originated from blood being found about the wrecked car. One of the guerrillas had nearly severed a hand by a hatchet blow aimed at the car.

Among other citizens of Memphis remaining after its capture were Ed and Alf Saville, Canadians, but thoroughly imbued with the doctrines of secession. These Memphis operators were for a time permitted to remain, but being suspected of communicating with the enemy, they were sent beyond the Federal lines. Ed Saville then took charge of the office at Meridian, Mississippi, and it was while manager of that office that he acted as a Confederate spy, tapping the Memphis and Corinth line, the story of which is related by the New York *Tribune* Memphis correspondent, A. D. Richardson, in his "Field, Dungeon and Escape." The W. H. Hall mentioned in the account, worked in Memphis with the Savilles when that city was captured, and was imprisoned in August, 1863, on charges of disloyalty while engaged in the Cairo office. It was said that he was ardently attached to a Memphis belle, who was devoted to the Southern cause, and that in his letter to her father he divulged important Federal secrets. He was confronted with those letters by Generals Hurlbut and Veatch, before being sent to the Memphis military prison in the Irving block. It is difficult to restrain un-

complimentary remarks about those who employed him, for whether guilty or not, his antecedent service was enough, however much he might protest fealty to the Union, to have caused his exclusion from Federal military telegraph offices. Richardson's account is as follows :

Halleck continued in command at Corinth. From some cause his official telegrams to General Curtis in Arkansas and Commodore Davis on the Mississippi, were not transmitted in cipher, and the line was unguarded, though leading through an intensely rebel region. In July, the Memphis operators, from the difficult working of their instruments, surmised that some outsider must be sharing their telegraphic secrets. One day the transmission of a message was suddenly interrupted by the ejaculation, "Pshaw! hurrah for Jeff. Davis." Individuality reveals itself as clearly in telegraphing as in the footsteps or handwriting. Mr. Hall, the Memphis operator, instantly recognized the performer by what musicians call his "time," as a former telegraphic associate in the North, and sent him this message: "Saville, if you don't want to be hung, you had better leave; our cavalry is closing in on all sides of you." (This was a ruse.—Author.) After a little pause,the surprised rebel replied: "How in the world did you know me. I have been here four days and learned all about your military secrets; but it's becoming a rather tight place, and I think I *will* leave. Good by, boys." He made good his escape in the woods. He had cut the wire, inserted one of his own, and by a pocket instrument perused our official despatches, stating the exact number and location of United States troops in Memphis. Reinforcements were immediately ordered in to guard against a rebel dash.

S. H. Beckwith, who was in the battles of Fort Donelson and Shiloh, and accompanied his regiment to Corinth and Jackson, Tennessee, was, in the middle of July, detailed to assist the operators at Halleck's in Corinth.

On the 1st of August, Superintendent David, of the West Virginia Department, having previously been commissioned captain and assistant quarter-master, was sent west where there were no commissioned officers in the Corps, with instructions to examine into the telegraph affairs and make such changes as his experience and observation should dictate. He recommended that Randall P. Wade be assigned to Missouri with John C. Van

Duzer as manager, saying that Van Duzer would be superseded by C. E. Bliven, and was doing too good work to be overlooked. Samuel Bruch, recommended to Stager for a commission, was made captain, and his jurisdiction made to include Kentucky and Tennessee. Van Duzer, who took hold again as assistant manager upon Bacon's taking the Memphis district, was retained in West Tennessee. Bliven was given a small appointment about Covington, Kentucky; Wade, a department north of the Ohio and east of the Mississippi rivers. Robert C. Clowry, chief operator since April, 1862, at head-quarters, St. Louis, was placed temporarily in charge of lines in Missouri, and George H. Smith soon received a captain's commission and an appointment to the management of all the lines west of the Mississippi. David, at his request, was returned to his own department, after an absence of about six weeks.

Halleck's, and subsequently Grant's, lines of communication were very long, and continually extending—so much so, that the commanders were thereby required to scatter their troops until there was not a unitable force at command exceeding the enemy in front, who threatened Corinth, Bolivar and Jackson, chief points of Federal defense. Sherman occupied the Memphis & Charleston road, about Chewalla, and later (June and July) with his own and Hurlbut's divisions, repaired the road west of Grand Junction, and after a temporary occupation of Holly Springs, relieved Hovey, at Memphis, and ordered him to reinforce Curtis at Helena, Ark. This was late in July. Halleck was, on the 17th of July, made commander-in-chief of all the armies and ordered to make his head-quarters in Washington. This brought Grant back to Corinth.

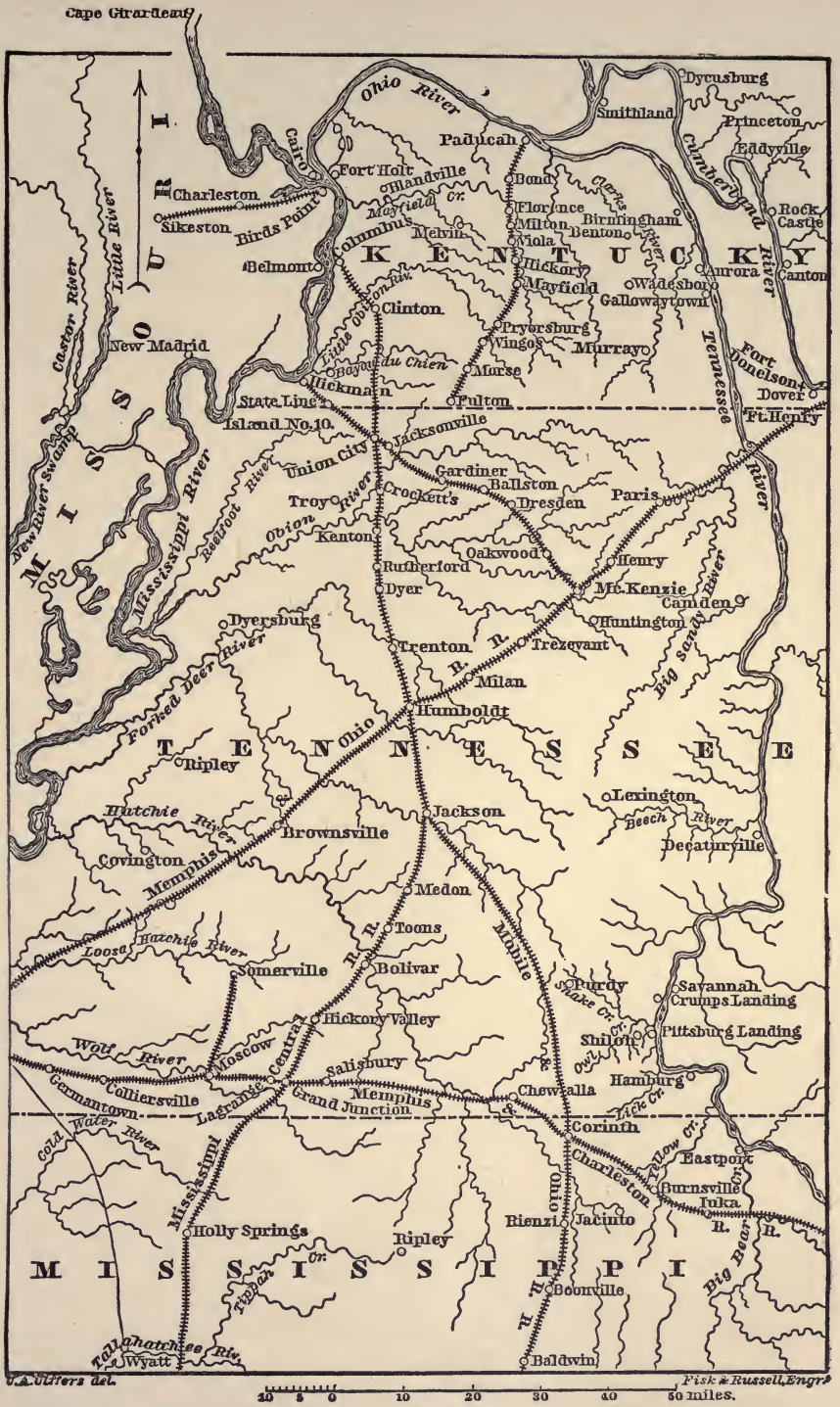
In the meantime, the Confederate authorities, thoroughly alarmed at the inroads of the Federals (who already held all of Missouri and Kentucky and Tennessee, except about Knoxville and Chattanooga, and also had a foothold in Alabama, Mississippi, Arkansas and Louisiana, besides their Eastern occupations), had begun a merciless conscription, rigorous beyond precedent in this country, by virtue of which Lee's armies in the East were swollen, and McClellan was driven to the banks of the James; McDowell, Banks and Fremont were desperately striving to defend Washington, Maryland and West Virginia, and Buell was

put to his wits' end to fathom and counteract Bragg's strong measures, menacing Louisville. Even Cincinnati was more terrified than Nashville, which was cut off from the world. Out of these mighty hosts, so "corralled," by a law, passed April 16, 1862, which substantially declared every man between the ages of eighteen and thirty-five a conscript, and every conscript who neglected to report for muster, a deserter, VanDorn and Price were reinforced, so that, notwithstanding the Confederacy was viciously on the offensive in Kentucky and Virginia, it spared VanDorn and Price about forty thousand troops, and among them those bold riders, Forrest and Armstrong and their cavalry, that needed but the order, to do and to dare. At this crisis, Grant telegraphed Washington: "My position is precarious, but I hope to get out of it all right."

The following lines, rebuilt or repaired in Grant's district, indicate Halleck's and Grant's telegraphic facilities, viz.:

	Miles.		Miles.
Columbus to Union City, Tenn.	26	Paducah to Columbus, Ky.	47
Union City to Jackson, Tenn.	60	Moscow (rebuilt) to Memphis	39
Jackson to Bethel	35	Pittsburg Landing to Corinth	30
Bethel to Rienzi, *via* Corinth, Miss.	25	Pittsburg to Waynesboro	37
Rienzi to Booneville	8	Hamburg, Tenn., to Farmington	18
Rienzi to Jacinto	9	Savannah to Pittsburg Landing	12
Corinth to Decatur, Ala.	95	Field Lines to Halleck's Hd-qrs.	30
Corinth to Memphis, Tenn.	93	Iuka to Eastport, Miss.	9
Jackson to Memphis, *via* Grand Junction	100	Iuka to Rosecrans' Hd-qrs.	1
Grand Junction to Waterford, Miss.	33	Iuka to Grant's Hd-qrs.	1
Cairo, Ill., to Clarksville, Tenn., *via* Ft. Donelson	188	Corinth to Grant's Hd-qrs.	2
Cairo to Blandville, Ky.	15	Corinth to Rosecrans' Hd-qrs.	3
		La Grange to Grant's Hd-qrs.	1
		Grand Junction to Hamilton's Hd-qrs.	2
		Total	919

This grand total represents the importance attached to the military telegraph service, and illustrates the energy of the Corps. Nashville was in communication with Corinth, direct, *via* Decatur, and *via* Pittsburg Landing, and indirectly by way of Clarksville, Paducah, and Jackson. A foreigner must have difficulty in believing that these long cords ran through a brave enemy's country, and were at the same time successful; yet it is a great fact. It will be readily understood that if the line between Cor-



THEATRE IN WESTERN KENTUCKY AND TENNESSEE, AND NORTHERN MISSISSIPPI.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA.

inth and Jackson was cut, these places could communicate *via* Decatur, Nashville, and Cairo, or Savannah, Nashville and Cairo. The offices on Grant's lines were managed by operators who were changed about a good deal, but, taking the month of September and including Memphis, which was not then in circuit, owing to the enemy's cutting the line, they were located as follows: Cairo, Ill.—(except while in Mound City Hospital, where the Sisters of Mercy assuaged their malarial fevers) W. L. Gross, manager; W. H. Parsons, Ed. Schermerhorn, John J. Egan, Steve L. Robinson (ten days), W. W. Forbes, Jacob V. Hill. Blandville, Ky. — James W. Atwell. Paducah, Ky.— T. R. Lewis, to sixteenth, and George Stillman. Columbus, Ky.—Edward H. Johnson and James K. Parsons. Union City, Tenn.—S. L. Robinson, to thirteenth, Stockton L. Griffin and Augustus Tyrrill. Jackson, Tenn.—James Q. Olmstead and Jas. H. Douglass. Bethel, Tenn.—Brace M. Burnett. Rienzi, Miss.— William B. Somerville, recently from Jacinto, Miss. Brittons, Tenn.—Thos. R. Berryhill. Corinth, Miss.—A. S. Hawkins, manager; Joseph Blish, Jr., Mark D. Crain, Anthony R. Walsh, Sam'l T. Brush, Algernon W. O'Neil and T. R. Lewis, from the twentieth: Iuka, Miss.—Edwin Peel, who was captured in a boat near Paducah, and who had served at Corinth, and probably escaped from Iuka with Colonel Murphy. Grant's head-quarters. —Ira G. Skinner and Samuel H. Beckwith. Rosecrans' head-quarters.—Horace W. Nichols and Lewis B. Spellman. Hamilton's head-quarters.—Lewis B. Spellman, in November, who was also with him at Clear Creek. Memphis, Tenn.—Duncan T. Bacon, who about this time took charge of head-quarters office, St. Louis, Frank S. Van Valkenburg. Henderson, Tenn.—Edward F. Butler. Trenton, Tenn.—Benjamin H. Peebles. Dodge's head-quarters, Humboldt, Tenn.— S. L. Griffin, part month, and John C. Holdridge. Bolivar, Tenn.—G. P. Lennox and J. T. Tiffany. La Fayette, Tenn.— William A. Thayer. Kenton, Tenn.—C. S. Whittlesey, who nearly died from sickness in his first month's service and resigned. Madison, Ala.—George E. Cromwell. Tuscumbia, Ala.—Edwin D. Butler and W. W. Forbes, from Cairo. Metropolis, Ill.—Charles Wallace, late of Kenton office. Mound

City, Ill.—George M. Brush. Mound City Hospital.—Frequent arrivals and departures. Caledonia, Ill..—George S. Pidgeon.

Very great trouble was experienced with the Ohio River cables at Paducah and Cairo. Two were laid in the Spring, but soon failed; one, owing to being destroyed by lightning; another was laid at Cairo in the middle of September, but gave out before night. The long circuit from Cairo to Corinth, Tuscumbia and Decatur for the most part worked heavy, *i. e.*, the ground escapes were numerous and occasionally prevented the use of the line. Nothing was so trying as the position of the operator who had important dispatches to send, and who could easily hear the office he wanted, but could not make himself understood because (as a rule) the operator at the distant office did not adjust his instrument so delicately as to catch the faintest change in the electric charge of the lines. When, however, he did respond, the fault was apparent, and it not unfrequently happened that Dante's Inferno was telegraphically portrayed in language fraught with blisters, and somebody consigned where time was not of the essence of the contract: of course retaliatory measures followed. It was after an occasion like this that Patrick Mullarkey, then working in the Memphis office, took a trip all the way to Louisville to see the operator who spoke, over the wire, inelegantly of him and his, at that presumably safe distance, but the truth was that "Pat" himself had an uneven temper. Another instance: "Hank" Cowan, while working at Bealeton, Virginia, during the war, became convinced that A. H. Bliss, operator at Rappahannock Station, deserved a whipping for telegraphic innuendoes which reflected upon Cowan's past and present, and assumed to foreshadow his future, whereupon "Hank" diplomatically pronounced it *casus belli* and mounting his Pegassus, flew to Rappahannock Station, but his ire, recently incandescent, had moderated when he reached the box car where Bliss reigned supreme. With a twinkle in his eyes, Bliss announced his readiness for the worst, but Cowan admitted that he had lost his anger, which

> "Is like a full hot horse, who being allowed his way,
> Self-mettle tires him."

Not to lose his ride entirely, he began a game of euchre without

a cooling-card, and when Bliss charged him with cheating, a new *casus* resulted and Cowan's optics changed color, but bent on rewarding merit, he caused his photograph to be taken and duly presented to Bliss with appropriate resolutions.

About the 1st of September, the rebels struck a detachment of the Federals at Medon and Bolivar. Small parties occasionally cut the line, but decamped as rapidly as possible thereafter, and for the most part the wires ran alongside the railroad so that repairs followed speedily. On the thirteenth day of September, Price seized Iuka, which Colonel Murphy had abandoned to him, and Grant supposing Price entertained designs against Nashville or by the coming of Van Dorn from the south-west, hoped to hem in the Federals at Corinth, determined, if possible, to crush Price before Van Dorn, who was four day's march from Corinth, could arrive. To this end Rosecrans with nine thousand men was to approach Iuka from the south *via* the Jacinto and Fulton roads, and Ord with eight thousand troops from the north. Both came in good time but owing to the wind blowing from the north, Ord could not hear Rosecrans' guns, and Price, whatever his purpose, made good his escape to Ripley by the Fulton road which Rosecrans did not take. The battle between Rosecrans and Price was short and severe, neither side being beaten.

Repairers James Raile and Horace Benedict while *en route*, east of Burnsville, about the thirteenth, to repair the line, were captured by Price's troops.

Price immediately began executing another plan against Corinth, but before it developed, perhaps before it was formed, *viz.:* on the twenty-third, General Grant changed his quarters to Jackson, the better to watch over Ord at Bolivar with nine thousand troops, and Rosecrans, who was left in command at Corinth with about eighteen thousand. October 2d, Price appeared before the city and cut the telegraph lines. On the next day Rosecrans developed the enemy's force and retired behind the defences to await the onslaught, but as soon as he discovered that Corinth was the objective, Rosecrans sent operator Beckwith, escorted by cavalry, around and behind the enemy to transmit telegrams to Grant. This was accomplished near Purdy, when the party safely returned with Grant's instructions.

LIBRARY OF THE UNIVERSITY OF

Early on the fourth, the battle began. Mr. Van Duzer was there with his operators, Hawkins, Blish Jr., Crain, Somerville, O'Neil, Lewis and Walsh. Jean Jourdé, the operator's *chef de cuisine* was there also. He rose early to prepare some great dish, perhaps it was *potage au gras*, possibly *pâtè de foie gras*, more likely *Schweinfleisch mit Bohnen;* but a shell suddenly fell and burst just outside of the operators' quarters, whereat Jourdé's hair assumed the perpendicular. Hawkins hurried out of bed, but none too soon, as a moment later, another shell came crashing through the building and struck the cot from which he had just risen, throwing it in atoms against the ceiling. Only a pale, sickly smile escaped him, as he contemplated how near eternity he slept. Van Duzer was in the same house, too sick to be about, but the "leaden rain and iron hail" gave him strength to seek other quarters without delay. Jourdé's excitement resolved its expression into the *langage des halles* and mutilated *anglais* as follows: "By gar! I no hook ze brakefas in ze plass. I shall go, *you shall come*, by gar!" and the boys stood not upon the order.

That was a dreadful conflict that raged until noon of that day, in and around Corinth, between eighteen thousand Unionists and thirty-seven thousand rebels. Battery Richardson was carried by assault and the enemy under Price rushed to the very center of the town, even to Rosecrans' head-quarters, but Van Dorn had been delayed on the left and, besides the Federal musketry, forts Chapman, Williams and Robinet opened an enfilading fire upon Price's troops, repelling them with great slaughter. Then Van Dorn's command, led by that brave Texan, Rogers, stormed Robinet. One brigade fell to pieces, but another pressed on; then that, too, crumbled and, leaving dead, wounded and captured, what remained of it hurriedly sought safety beyond the reach of Federal guns. The casualties were frightful, for, it is said, one thousand, four hundred and twenty-three Confederates were killed and nearly six thousand wounded. During the battle and the pursuit, two thousand, two hundred and forty-eight prisoners were captured.

The defeat of the troops under Van Dorn, Price, Lovell, Villipigue and Rust at Corinth, and their hasty flight from Ord's forces, which came out from Bolivar, and Rosecrans' troops,

which started in pursuit, aided by McPherson, who had come down from Jackson, carried the greatest consternation into the enemy's ranks and as well also throughout the whole South. Of course the Unionists were correspondingly emboldened; moreover, Grant was receiving reinforcements. He therefore determined to assume the offensive. Rosecrans was, on the twenty-fourth day of October, ordered to supersede Buell, whose forces were then mainly in Kentucky. Three divisions were sent from Corinth and two from Bolivar to Grand Junction, where they arrived about the 4th of November. From this place on the M. & C. R. R. a single track line of railroad ran to Jackson, Mississippi, and Vicksburg. It was by this line that Grant had to feed and clothe his troops, and bring his munitions of war as he advanced. Lieutenant-General J. C. Pemberton succeeded Van Dorn (who, however, remained), soon after the Corinth affair, and fortified a line of defense along the Tallahatchie, in the neighborhood of Wyatt and Abbeville, Mississippi. Sherman came down from Memphis, and as Grant was about to flank Pemberton, the latter fell back without a struggle, so that by the 5th of December Grant was at Oxford and his cavalry within eighteen miles of Grenada. Sherman, about the 8th of December, was sent back to Memphis to organize a river expedition against Vicksburg, as we shall see, in co-operation with Grant's own advance against that stronghold by land.

But while Grant was arranging for his own advance, Sherman embarked on the nineteenth and steamed down the river to Helena, Arkansas, where, on the twenty-first, Curtis' troops under Steele joined him for the joint objective.

December 20, Van Dorn's cavalry destroyed Grant's immense accumulation of stores at Holly Springs, Mississippi, and without much resistance captured its garrison, commanded by the same Colonel Murphy who, a few months previous, evacuated Iuka to Price, and who was dismissed from the service for his misconduct at Holly Springs, which seems too easy a sentence for his great neglect. Van Dorn also struck the communications higher up, meeting determined resistance at Coldwater, Davis Mills, Bolivar and Middleburg: Forrest at the same time was on the railroad in Tennessee. These blows determined Grant, who was unused as yet to feeding his army off the country, to return

northward and try the river route. But the lines of telegraph were so badly destroyed that it took about two weeks to reopen them, and Grant, having already planned another route for his entire army, determined to evacuate the railroad north of Jackson, but hold the line from Memphis to Corinth. Having already given a sufficient outline of military events under Grant to indicate the importance of his undertakings and the consequence of Sherman's co-operation, we will now inquire more particularly, what occurred in this district, of interest to the telegraphers as such.

Although we have mentioned the building of a line to Grand Junction, it had to be rebuilt, and October 11, orders were issued by Grant therefor. Offices were opened at Midway, Pocahontas and Grand Junction. Sol Palmer, assisted by Mark Crain, Ed Schermerhorn, H. C. Weller and J. S. Burlingame, foremen, rebuilt all the lines required by Grant during Van Duzer's management in Mississippi and West Tennessee. Grant's office at Jackson was closed at noon of November 3, and opened at Grand Junction the fourth, and later at La Grange. Van Duzer was directed to send all the operators he could to the front, wherefore, all left Corinth except A. J. Howell and C. H. B. Gile, new men, and Tony Walsh. Some of the offices were closed or their force reduced, so that Schermerhorn, Crain, Johnson (B. H.), Sullivan, Beckwith, Skinner, Parsons, Hill, Ingle, Nichols, Somerville, Hawkins, Spellman, O'Neil and Lewis were at Grand Junction or near by, and J. S. Lyle, Jacob V. Hill, R. B. Griffin, D. K. Smith, Ellis Stone, J. W. Atwell and C. W. Pierson were newly employed on these lines.

Redington, at Medon, and Lenox, at Bolivar, appear to have fallen under suspicion of being disloyal, but the former, as we understand, was released from prison at Memphis and sent to Fort Donelson office, positive evidence of his innocence; and as to Lenox, a journal of that period, kept by an able operator, reads as follows: "He was arrested at Bolivar for disloyalty, and ordered out of this military district within three days. *That he is really disloyal, no one believes;*" but it was one of the misfortunes of an operator's position that he could not have a court-martial. A. D. Dougherty, operator at Smithland, was removed in 1863 on charges affecting his character, and though

he protested bitterly against such action without a fair hearing, there was no such privilege granted him. Such rights were not secured to civilians in any of the departments.

One night about the last of October, a Confederate general and colonel, whose homes were at Bolivar, it is said, visited their families there. A negro servant of one of them informed the operator, J. T. Tiffany, of their presence, whereupon he took a squad of soldiers and surrounded and captured the officers, who were taken to General Logan at Jackson. But as the story reads that these high officers took the oath of allegiance and were released, it should be taken *cum grano salis.*

September 5, the following was telegraphed to all operators:

> Walter Campbell, an operator, formerly connected with this line, is suspected of making use of his privileges, as an operator, to the detriment of the service. He must be entirely excluded from offices, and if he loiters about within hearing of the instruments, you will make the case known to the officer in command, that he may be removed or arrested. (Signed) J. C. VanDuzer, *Supt.*

This order doubtless originated from Tiffany's arrest by General Ross, for allowing a Southern operator to come into the telegraph office. Tiffany was kept in the old court-house until General McClernand heard of it, when he ordered Ross to release him at once. Probably Ross's fears were unwarranted by the facts.

The cotton fever, in West Tennessee, ran high, and as a consequence many civilians had, on one pretext or another, obtained passes to the cotton localities within the Union lines. These speculators did so much telegraphing that General Grant, on the 11th of November, directed that no private business be done till further orders. This was subsequently modified so as to allow it a few certain hours each day.

When the troops advanced southward from Grand Junction, B. H. Johnson, operator, accompanied Colonel Pride, Grant's Chief of Engineers. Johnson's first office below, was in a tent at Lamar, where Colonel Bissell's engineers were building a bridge. While here, the operator went foraging with some soldiers, and, having reached their destination, near ten miles out, the foragers were busy cutting up fresh pork and catching chick-

ens, when a negro, mounted on a mule, came tearing down a hill; yelling at the top of his voice, "De grillas is after youens, jest over de hill thar." All of the party, except one, mounted and spurred homeward, Johnson in the van, until the camp was reached. If it was not on this ride, it ought to have been, for, at one time or another, in this vicinage, owing to some fault in the horse, or perhaps the stirrups were too short or Johnson's legs too long, in short, anything compatible with good horsemanship, the hind bow of his Mexican saddle cut a *semi*-circular slit in the seat of his pants, and made him sit standing for a week. After all, he fared much better than the forager left behind, for he was captured and shot.

Pending Grant's retrograde movement, Johnson, who was dressed in all the paraphernalia of rank, except shoulder-straps, went to the seminary building, at Oxford, where he was then stationed, to appease his hunger. About thirty soldiers were there, and, being on their retreat, recked little what they did, consequently they were eating the pretty schoolma'ams and misses "out of house and home." Johnson took in the situation at a glance, and, assuming to be bigger than a brigadier, ordered the soldiers to repair at once to their regiment, which they did. The young ladies thereupon, out of gratitude, treated him to a fine dinner. That same afternoon, while standing about his instrument with his coat off, thus exposing the half moon patch on his pants, proof positive that he was not the great Mogul he had appeared at the seminary, some of the soldiers whom he had driven away, rushed in at the door after Johnson, swearing vengeance as he bolted through the window and fled to the residence of Secretary Fox, of the Confederate Cabinet, where were General McPherson's head-quarters.

Scouts reported VanDorn's and Forrest's threatening movements in ample time to enable Grant to notify all the post commandants thereof, which he did promptly, by telegraph, but he especially warned Murphy, at Holly Springs, to prepare for Van Dorn, and Sullivan, at Jackson, Tenn., to look out for Forrest. Notwithstanding, as we have seen, VanDorn, at day-break, entered the place, almost unopposed. The telegraph office was at once visited. Operator Horace W. Nichols was at his instrument. Hearing stray shots and discovering the rapid approach

of the enemy, he hurriedly thrust his dispatches into the fire, and his money into his boot leg, and then seizing the telegraph key, called Grant's office and said: "Good by. VanDorn is coming. Devil only knows what 'll become of me. Here they are, now," and, sure enough, they stood just by the window where his instrument was, covering him with revolvers, so that he was prevented from saying more. Lew. Spellman, from Grant's office, and Sol. Palmer took a hand-car and repaired the line, which was in operation to Grand Junction twenty-four hours after it was cut in the office at Holly Springs.

General Forrest, having recently returned to Columbia, Tenn., from his bold exploits upon Buell's communications, crossed the Tennessee at Clifton, but was met near Lexington by an inferior force of Federals, sent by Sullivan from Jackson, Tenn., and after a struggle, quite determined, it was driven back, thus enabling Forrest to threaten Jackson itself two days before VanDorn entered Holly Springs. Jackson being strongly defended, Forrest contented himself with striking, at night, the railroads leading therefrom, and the next day he took the Spring Creek road for Humboldt and Trenton. Grant had given orders that all commandants should hold their positions "at all hazards," and this all seem to have valiantly endeavored to do, as far on the road to Columbus as Forrest dared to penetrate, but he captured many small commands and telegraphers along his route, besides destroying the telegraph badly and burning miles of railroad trestle-work along the bottoms of the Obion. Humboldt and Trenton fell on the 20th of December; Kenton and some stockades, the next day, and Union City the twenty-second. By this time, Forrest was himself in great straits, but finally succeeded in eluding the Federal infantry and recrossing the Tennessee at Clifton after being badly worsted at Perryville, on the river.

J. C. Holdridge, operator at Humboldt, had his office in the hotel, of which he was also landlord. On the nineteenth, he reported to Cairo that the line was cut at five, A. M., eight miles north of Jackson, and in the afternoon that he could hear firing in that direction. The next we hear of John, he was at Kenton and his hotel property had been destroyed. At three, P. M., of the twentieth, J. S. Lyle, who remained at his post at Trenton,

to the last, telegraphed to the Northern offices: "The rebs are in sight and the fun has commenced;" then the line was cut, but Lyle collected his dispatches and threw them with his instruments into the office stove, where they were destroyed. Of course Lyle was captured. At Kenton, Holdridge was captured about four, A.M., with his Humboldt instruments, which he could not destroy, as he was taken by surprise, and soldiers stood over him, threatening to shoot if he attempted it. Stephen Robinson, a small boy operated at Kenton, where three companies of the One Hundred and Nineteenth Illinois infantry were stationed. His office was on the Trenton side of the town, and the commanding officer agreed not to leave without letting him know, but the enemy were in the place, and the infantry out, before Robinson discovered his peril. He then wrapped his shawl around his instrument and walked away. He was too little to attract attention. Crossing the Obion trestle alone that dark night, he connected his instrument near Crocket and telegraphed the situation to Columbus. A train of cars sent out, was stopped by a fire built on the track by negroes, and the infantry, contrabands and operator, safely taken to Columbus. Augustus Tyrrill was captured at Union City, and Wallace W. Forbes somewhere between Columbus and Jackson.

On the very day that Forrest began his retreat, W. G. Fuller, late of West Virginia, and Central Kentucky, arrived with Captain Bruch at Cairo where, for reasons which we will soon explain, he was duly installed as chief officer, under Bruch, of the Corps in Grant's district, now designated department.

William Greenleaf Fuller, one of the most conscientious of men, was one of seven children—all under fifteen—left by the death of their father in South Carolina in 1838, to be supported by their widowed mother. His ancestry was of New England's best, being in part, of that from which John Greenleaf Whittier was sprung. On the demise of her husband, Mrs. Fuller returned to Massachusetts, where with her scanty means she sought to rear her family. How well she succeeded may be conjectured from the fact that she (now eighty-two years old) and all of them are still living. William, born in 1827, at nineteen, began work in a factory at Lowell, but, owing to ill health he was induced to ship as a fireman on the United States steamer

"Mississippi," fitting for a cruise in the Mediterranean Sea. War with Mexico threatened and the steamer went to the Gulf. He could not stand the heat of the furnace and was made assistant Ship's Yeoman. While at Vera Cruz, war was declared, and the "Mississippi" steamed to Point Isabel, where her force volunteered to reinforce General Taylor of the United States Army. Taylor was met just after his second victory at Resaca de la Palma. Returning thence to the steamer, which was the flag ship of Commodore Perry, Fuller participated in exploits and attacks along the Mexican coast, especially at Tampico, Vera Cruz, Alvarado, and Tobasco up the Tobasco River.

WILLIAM G. FULLER.

On the return of the "Mississippi" in 1847, Fuller learned that his mother had procured his discharge on account of his minority. Thereupon, he began learning the art of telegraphy. His first employment as operator was by F. O. J. Smith, an accomplished statesman, a learned jurist and pioneer in telegraph affairs, and Eliphalet Case, on the New Orleans and Ohio line, at Cincinnati, Ohio, in 1848. He served also, at New Richmond and Marietta, Ohio, which latter office, under his administration, was the only one on the line that paid more than expenses. In 1854 the company failed. The Ohio stockholders re-organized, and Hon. V. B. Horton, of Pomeroy, selected Fuller as superintendent of that portion between Wheeling, Va. and Cincinnati. When the Marietta & Cincinnati Railroad was constructed, Mr. Fuller rebuilt the lines over that route. In 1857, the Hon. Amos Kendall arranged with the Baltimore & Ohio and Marietta & Cincinnati Railroad companies, for an independent line

between Baltimore and Cincinnati. Fuller laid the cable at Parkersburg and constructed the line thence to Cincinnati, where an office was opened in the Burnett House. At the beginning of hostilities between the States, Mr. Fuller was superintendent of the Marietta & Cincinnati Railroad line and the western division of the Independent Company's line. These responsible positions he was quick to surrender for service where he felt he could do more good to his country. No officer of the Telegraph Corps proved more intensely solicitous to forward the cause of the Union than William G. Fuller, and he probably constructed as many miles of military telegraph as any other person.

General Grant had already become convinced that he could not maintain his railroads and telegraphs, and the indications were anything but assuring to Captain Fuller. However, he entered vigorously upon his work, and by the 3d of January, the line from Cairo to Grant's head-quarters at Holly Springs, and by the 8th of January, the newly repaired line from Grand Junction to Memphis, were in complete working order. Ed. Schermerhorn, a reckless, daring nondescript, convivially inclined, but one of the most expert operators in the country, was in charge of a gang of builders on the Memphis line about the 1st of January, when all were captured by guerrillas, under one Richardson. The builders' names are T. Berry, J.W. Berry, C. D. Applegate, A. E. Atwell, C. D. Walker and George Bishop. Nearly all of these men and those captured north of Jackson, were paroled, some not to re-enter the Confederacy, and others not to act as Federal operators during the war. They arrived at Cairo about the same time that E. F. Butler did, he having had the misfortune while operating at Henderson, Tenn., late in November, to be captured by guerrillas, who burned the station and telegraph property, and took Butler to Forrest at Columbia, Tenn., where he was released on his promise not to return to Tennessee. All of the soldiers captured by Van Dorn and Forrest were also paroled.

Exciting as were the raids of Van Dorn and Forrest, to the telegraphers in Grant's department, they were not so demoralizing to the Corps as the move of the Federal commander himself, which was initiated on the 13th of November, 1862, by his appointing Colonel John Riggin, of his staff, superintendent

of the military telegraph lines in the department. That was an exercise of power for which there were the precedents of McClellan's appointment of Mr. Stager in West Virginia, and Fremont's of G. H. Smith in Missouri, with this important difference: that since those appointments the Telegraph Corps had been organized, as heretofore explained, under the direction of the Secretary of War, who, on the 8th of April, 1862, issued an order—"No. 38"—substantially like that shown in special order, number three hundred and thirteen, on page one hundred and thirty. A few months later, the following order was issued:

HEAD-QUARTERS ARMY OF THE MISSISSIPPI,
In the Field, Corinth, July 14th, 1862.

Special Field Order, No. 156.

Telegraph operators and employés are, as a general rule, subject only to the officers of their own corps or orders *communicated through them* by the Secretary of War or commanding general of the department. Where an officer commanding a post or force in the field, deems it necessary to close or move a telegraph station, or to arrest or remove an operator, the reasons for so doing will be immediately communicated to head-quarters for approval. Military telegrams will always have preference and when the business of military lines cannot, in the opinion of the superintendent, be otherwise properly attended to, commercial and private telegrams will be excluded. The commanders of posts and stations will assign quarters for telegraph offices, and will see that all unauthorized persons are entirely excluded from operating rooms and their vicinity.

By order of Major General Halleck.

N. H. MCLEAN, *A. A. G.*

It is believed that General Grant did not design to relieve Van Duzer by this appointment, but merely to place the oversight of telegraphic affairs in Riggin's hands. Colonel Riggin was not a practical telegrapher, and although an accomplised officer and gentleman, he did not understand the duties of his new position, and hence, it may be, he gave but few orders; even those were inoffensive. But, as was his duty, Van Duzer informed his superiors of the new *status*, which information resulted immediately in the following telegraphic correspondence:

WASHINGTON, November 14, 1862.

To U. S. GRANT, Major General:

Some one, signing himself, "John Riggin, Superintendent of Military Telegraphs," is interfering with the management of telegraphs in Kentucky and Tennessee. This man is acting without the authority of Colonel Stager, general superintendent of military telegraphs — see general order No. 38, April, 1862 — and is an imposter. Arrest him and send him north of your department before he does mischief by his interference.

By order of the Secretary of War. P. H. WATSON,
Asst. Sec. of War.

To which General Grant replied as follows;

John Riggin, referred to in your despatch, is my aide. He has given but one order referring to telegraphing, and that was dictated by me. It was, that private despatches might be sent over the wires before ten o'clock, A. M., when they did not interfere with military despatches. Colonel Riggin is assigned the duty of military superintendent of telegraphs within this department, a position which interferes with no present arrangement, but is intended solely for my relief. Misrepresentations must have been made.

And thereupon Assistant Secretary Watson rejoined:

Colonel Anson Stager having been appointed by the Secretary of War, superintendent of military telegraphs and of the construction and management of military lines, Colonel Riggin must not interfere. Colonel Stager has appointed deputies, believed to be competent, but if they fail in their duty a report of the fact to Colonel Stager will bring a prompt removal.

It was soon found convenient to entrust Colonel Riggin with special duty at Memphis, and Van Duzer was directed to prepare to restore the line from Grand Junction to Memphis and from Memphis to Grenada.

The conflict of authority appears to have become quiescent, and so it remained until the 30th of November, when the operator at Holly Springs, who had that day opened that office, astonished all the operators in the department by the startling announcement that Van Duzer had been arrested and placed in

the guard-house at that place. General Grant telegraphed Colonel Stager that Van Duzer must be removed and another man be appointed in his place, and that his (Grant's) orders must be obeyed. Just what the disobedience, if any, consisted of, we are not sufficiently advised to state. Assistant Secretary Watson directed General Grant to telegraph his charges against Van Duzer to the War Department. Although they were preferred, no trial was ever had, and it is believed that General Grant was himself subsequently convinced that he had been deceived by his chief operator, Ira G. Skinner. Van Duzer's confinement for four days was so close that no operator was allowed to communicate with him. Colonel Riggin again appeared on the scene, directing Gross, manager at Cairo, to keep supplies on hand and order what was required from the East. This was promptly countermanded by Colonel Stager. Gross advised the operators to continue to discharge their duties, notwithstanding their devotion to Van Duzer, as otherwise the consequences to the armies might be very injurious; moreover, he believed Van Duzer would be sustained. But the operators were bent on asserting the independence of the Corps. Grant heard of their purposes, and issued an order to every commander of his military posts along the lines to arrest every telegraph operator that resigned or attempted to leave his post or refused to do duty as theretofore, and place him under close confinement and to acknowledge the receipt of the order by telegraph. Somerville at Waterford was arrested, probably for refusing to serve, but most, if not all, of the others submitted with the best possible grace. Van Duzer was ordered out of the department, under guard. December 5, General Halleck telegraphed General Grant at Abbeville as follows:

The Secretary of War has called my attention to your telegraphic despatches in regard to operators and offices. Colonel Stager was charged by the President, under a law* of Congress, with the entire management of military telegraphic operations. He directs all purchases and appoints and removes all officers under the direction of the Secretary of War. If any operator fails in his duty report him for removal. In extreme cases he may be arrested, just as you can arrest any officer of the Navy or the Treasury De-

*There was no such law.

partment. Colonel Stager directs all telegraphic purchases. In case of deficiencies, report the fact and do not order purchases. They can not be paid for out of the Quarter-master's Department. Any orders to that effect given by you will be immediately countermanded.

By the time that Van Duzer reached Grand Junction, Lieutenant Colonel McDermot, commanding there, received an order from the Secretary of War, directing his release. But McDermot, either believing or feigning to believe that the order was bogus, declined to obey it. It is proper here to state that this is the only instance known to the author of the genuineness of a telegraphic order being questioned by a military officer during the whole war, except when there were reasons to believe it was telegraphed by rebel operators. After Van Duzer reached Cairo, it was not deemed advisable by Secretary Stanton to precipitate a crisis by ordering his return. Had that order been given, General Grant might have asked to be relieved. After a time, Van Duzer was given the management of the telegraphs under Bruch in the Department of the Cumberland and an honorary staff appointment with General Rosecrans, and Fuller, as we have seen, succeeded Van Duzer in West Tennessee. When Grant's department subsequently included the Cumberland and he appeared at Chattanooga, Captain Bruch proposed to send Van Duzer back to West Tennessee and bring Fuller therefrom. But Van Duzer determined upon resigning rather than to be sent from pillar to post; however, General Grant, if he ever entertained any personal feeling against Van Duzer, was just enough, probably owing to additional information obtained in the interim, and also in consideration of his valuable services under Rosecrans, to again entrust him with his fullest confidence, which, it is certain, General Grant never had occasion to regret.

One other unfortunate conflict culminated the very day of Captain Fuller's appointment, above mentioned, and it may have had some connection therewith. It grew out of the following order:

CLEVELAND, November 13, 1862.

TO ALL TELEGRAPH OFFICES :

A strict observance of the following order is required: The

original copy of every telegram sent by any military or other government officer must be retained by the telegraph manager or operator and be carefully filed, and at the end of the month, mailed to the War Department at Washington. You will retain a copy of all such messages. In no case will you allow the original ciphers to be given up or destroyed, except to prevent their falling into the hands of the enemy.

By order of the Secretary of War.

(Signed,) R. P. WADE, *Capt. and A. Q. M.*
and *Asst. Supt. Govt. Telegraphs.*

On the 8th of January, 1863, Captain Fuller reported by telegraph to General Grant for duty, and on the same day his operators informed Fuller that General Grant had "taken possession of yesterday's business," and the General himself telegraphed:

Whose order is it that originals of all telegrams passing over military lines be sent to Washington? An order for the disposal of military telegrams would come through me from some one authorized to give me orders. Private despatches I care nothing about. You can make your own regulations concerning them. Answer, sending me copy of order.

To which Fuller replied that the order referred to, was embraced in a letter of instructions originating with Colonel Anson Stager, General Superintendent of Military Telegraphs, Washington, D. C. As this reply omitted to state that the order emanated from the Secretary of War, it was quite defective. General Grant thus informed, rejoined:

Colonel Stager has no authority to demand the originals of military despatches, and cannot have them. I keep a record of my despatches and destroy the originals. I appreciate your informing me of the order you had received before acting upon it. Inform Colonel Stager that he transcends his authority when he demands the military correspondence taking place in this department.

Just what the purpose of the order was, we have not deemed it important to inquire, but we do know that a rule obtained in the quarter-master's department, that all vouchers covering expenses of telegraphing should have attached thereto, the messages charged for, as a check against unnecessary telegraphing.

We cannot, however, conceive of any sufficient reason why such an order should include messages of department commanders, and do not believe that it was originally intended so to do; and this belief is strengthened by the understanding that no attempt was ever made to enforce it against them. Be that as it may, it is in virtue of that order that the War Department is now able to print (as it is doing) many volumes of important dispatches.

We left Sherman at Memphis, where he fitted out an expedition, to be composed of his own and Steele's forces, to be convoyed by gunboats and conveyed by a fleet of steamers to near Vicksburg. The following telegram is a concise statement of the general plan:

OXFORD, December 8, 1862.

MAJOR GENERAL H. W. HALLECK,
Washington, D. C.:

General Sherman will command the expedition down the Mississippi. He will have a force of about forty thousand men; will land above Vicksburg (up the Yazoo, if practicable), and cut the Mississippi Central road and the road running east from Vicksburg, where they cross Black River. I will co-operate from here, my movements depending on those of the enemy. With the large cavalry force now at my command, I will be able to have them show themselves at different points on the Tallahatchie and Yalabusha, and when an opportunity occurs, make a real attack. After cutting the two roads, General Sherman's movements, to secure the end desired, will nccessarily be left to his judgment. I will occupy this road to Coffeeville. (Signed) U. S. GRANT, *Major General.*

Concerning General Sherman's movements, in his "Memoirs," he writes:

The preparations were necessarily hasty in the extreme, but this was the essence of the whole plan, namely, to reach Vicksburg, as it were, by surprise, while General Grant held in check Pemberton's army about Grenada, leaving me to contend only with the smaller garrison of Vicksburg and its well known strong batteries and defenses.

Sherman reached Milliken's Bend, a little above Vicksburg, on Christmas day, and proceeded vigorously to effectuate his in-

tended *surprise*. But there was one vastly important obstacle to any surprise, of which Sherman in his hasty preparations was doubtless unadvised, and Steele probably was also ignorant of it. It consisted of a private telegraph line, connecting De Sota, La., opposite Vicksburg, with Lake Providence, La., seventy-five miles above Vicksburg, on the river. This line was built by Dr. Horace B. Tebbetts, a wealthy planter, on one of whose magnificent estates, twelve miles below Providence, was an office, where Lee S. Daniel was *quasi* C. S. Military telegrapher. Maj. and Supt. E. G. Earnhart also resided and had head-quarters on the plantation. At the De Sota end, Philip H. Fall operated. General Martin Luther Smith, commanding Confederate forces at Vicksburg, took military possession of this line. It became the duty of Fall, who lived in Vicksburg, to cross the river every evening, and remain in his office until morning. For this purpose the artillerists at Vicksburg were directed to respect his boat, which carried a green light. Smith's purpose in all this was to keep advised of any boats passing down the river, as it was well known that the Federals were exceedingly anxious to capture Vicksburg, and thus at a stroke sever the Confederacy and free that mightiest of American rivers. On Christmas eve, about eight P.M., Earnhart and Daniel were playing old sledge at Earnhart's house, when they heard the unusual noise of the paddle-wheels of steamboats. Leaving their cards, they stepped out on the balcony of the house which stood on an angle of the river and presented a view of the Mississippi for six miles above. This whole stretch was filled with boats, descending the river. It was a grand and portentous spectacle.

As soon as Daniel could count the boats and gun-boats, he mounted his horse and hastened to his office, three miles distant, where, calling De Sota office, he telegraphically exclaimed: "Good God, Phil.! sixty-five transports, loaded with troops have already passed. There must be as many more, for hundreds of lights can be seen up the river." That was the last message sent over that line during the war, as the next morning Sherman's troops commenced its destruction. At Vicksburg, there was joy and revelling. General Smith and many gayly uniformed officers were tripping to the music of Terpsichore. Mississippi "had gathered there her beauty and her chivalry."

Fall reported to Smith at the ball, and noticed his teeth clench and his face grow ashen. In a moment Smith and his staff disappeared; "Then and there was hurrying to and fro, * * and mounting in hot haste," and within ten minutes not a dancer was left of all that gay throng; but before they reached their homes, President Davis, in Richmond, Pemberton, at Grenada, and other Confederate officials, were advised by telegraph of the impending danger to Vicksburg—by far the most important point to the Confederacy in the West. Who shall say that Sherman's failure to take Vicksburg by driving the enemy from Chickasaw Bluffs, where Sherman was repulsed with a loss of one thousand, eight hundred and forty-eight men killed, wounded and prisoners on the 29th of December, was not due to that telegraphic report, which enabled Smith and Stephen D. Lee to concentrate rapidly by rail a force which, behind works, Sherman could not dislodge. In his "Memoirs," General Sherman says:

> From our camps at Chickasaw, we could hear the whistles of trains arriving at Vicksburg; could see battalions of men marching up towards Haine's Bluff, and taking post at all outposts on our front. I was more than convinced that heavy reinforcements were coming to Vicksburg, whether from Pemberton at Grenada, Bragg in Tennessee, or from other sources, I could not tell.

Abandoning this enterprise for the present, by the 2d of January all of Sherman's troops had re-embarked, and under the orders of McClernand, who had arrived and on the fourth assumed command, the fleet steamed up the Mississippi and Arkansas rivers to Arkansas Post, which was captured on the eleventh, and with it over six thousand of the enemy. By the twenty-first all of these forces again debarked at Milliken's Bend to await the coming of General Grant.

CHAPTER XI.

THE TELEGRAPH IN TENNESSEE AND KENTUCKY.—FORREST'S, WOODWARD'S AND MORGAN'S RAIDS.—BUELL'S ARMY RETIRES TO KENTUCKY.—CUMBERLAND GAP EVACUATED.—RICHMOND (KY.)—NUMEROUS INCIDENTS.—PERRYVILLE.—ROSECRANS SUPERSEDES BUELL.—NASHVILLE AFFAIRS.—STONE RIVER.—EXCITEMENT IN NASHVILLE.—MORGAN AGAIN IN KENTUCKY.—SPIES HUNG.—OPERATORS TAP CONFEDERATE TELEGRAPHS.

We left General Buell and his army *en route*, in June and July, 1862, for Chattanooga, Tennessee, repairing the Memphis & Charleston Railroad as he progressed. General Braxton Bragg was directed by Confederate authorities to concentrate opposing forces at Chattanooga. These began to move thereto from Mississippi and elsewhere, simultaneously with Buell's.

Before entering upon the story of the great marches and countermarches of the Federal and Confederate forces in Tennessee and Kentucky, we will discover the bold exploits of Generals Forrest and Woodward and Colonel John H. Morgan upon Buell's communications in those States. Although the railroad from Nashville to Stevenson was not completed until July 28, nor the Nashville & Decatur road until August 3, yet both were repaired many miles south of Nashville much earlier. Forrest, who left Mississippi and his regiment for a new command at Chattanooga, organized an expedition into Middle Tennessee, composed of the Eighth Texas, First Louisiana, Second Georgia and a few other troops. With these he surprised the Federal forces at Murfreesboro, twenty miles below Nashville, capturing Brigadier General Crittenden, two regiments of infantry and seven companies of cavalry. Owing to the surprise, the detached positions of the troops and the belief that Forrest's numbers were overwhelming, no combined defense was made. The considerable resistance which Forrest met, arose from detachments, and when they surrendered large quantities of quar-

ter-master and commissary stores fell into the enemy's hands. Of course, as much damage was done to the railroad and telegraph as Forrest, who hurriedly retired to McMinnville with his prisoners, had time to effect.

John J. Wickham, operator, entered the Federal service in May, 1862, at Murfreesboro, where he was captured by Forrest. He narrowly escaped being shot, at the moment of capture, by a rebel soldier, whose captain prevented it. Wickham succeeded in destroying his cipher key and all the dispatches in his possession before capture. The next morning, near Woodbury, by a stratagem, he effected his escape. Being closely pursued, he took to the fields to elude his captors, and finally hid in a blackberry thicket, where he was accidentally discovered by an officer and two men who were not in search of him. He was that night taken to McMinnville, where Forrest cursed him roundly for doing just what he would have done. At McMinnville all of the soldiers were paroled, but the officers were sent to Knoxville. Operator Brush, a little later, was taken from Libby prison because he was not an officer, but operator Wickham was sent to Knoxville and imprisoned there with the officers on the ground that he was an officer. While there he, one night, attempted to escape by passing the prison sentries. They fired at him without effect, but he was brought back during the night and placed in an iron cage about six feet square; being the same one that Parson Brownlow had occupied some time before. Wickham was kept there two or three weeks, when he was again given the run of the prison. An East Tennessee woman was permitted to bring edibles to her brother there, also a prisoner. During these visits, she graciously arranged for Wickham's escape in female attire, but he was suddenly transferred to Libby prison in Richmond, Virginia, where, after some months, he was paroled and finally exchanged, when he re-entered the Corps and took part in the Atlanta campaign

About dawn of the twentieth, Forrest appeared at Lebanon, Tenn., and, gaining the road between Murfreesboro and Nashville, he did a little injury, but was glad to escape Nelson's infantry, and return. A little later he struck the road near Manchester and then the McMinnville Branch Railroad, doing some damage, which was speedily repaired. During his retreat

he was badly worsted between McMinnville and Murfreesboro, by Colonel Fyffe's three regiments and a battery. When Buell's rear guard left McMinnville for Nashville and Kentucky, as shown hereafter, Forrest pounded ineffectually against it. He seems not to have been prominently identified with any movement in Kentucky during his stay there in September. October 1, he assumed command of the recruits arriving at Murfreesboro, Tenn., then held by the Confederates.

Colonel John H. Morgan's operations against the railroads and telegraphs, were more serious. We last noticed him, late in July, 1862, escaping from Eastern Kentucky to Sparta, Tenn. About the 20th of August, he started on a new expedition, crossing the Cumberland near Hartsville, unopposed. Confederate States operators Dudley and Ellsworth accompanied him. By daybreak, Morgan's force drove in the Federal pickets at Gallatin, Tenn., and with little difficulty, captured the garrison. The pickets fired one volley and ran. A soldier riding near Dudley was the only person injured in the affair. Colonel Boone of the Twenty-Eighth Kentucky regiment was in command at Gallatin. His troops were stationed at the fair grounds about a mile north of the town. His wife came the day before and consequently the Colonel took rooms in the village hotel, where Morgan's men surprised and captured him.

J. N. Brooks, who had done good service at Edgefield and Franklin, Tenn., was at this time railroad and express agent and military operator at Gallatin. He lodged up stairs, over his office in the depot. About daylight, he heard some one coming up stairs; thinking it was the porter, he paid no attention to the footsteps, being half asleep, but suddenly he heard a voice say "Surrender, in the name of John Morgan." Rising, he saw Ellsworth and another man, each with navy pistols in both hands, cocked and pointed at him. Brooks replied, "Certainly." Ellsworth ordered him to dress, and after Brooks had partially done so, asked if he had any money. Brooks replied that he had a little, whereupon a pistol was presented and Brooks ordered to "shell out." When Brooks gave Ellsworth the purse he had in his pocket, Ellsworth counted out forty dollars and returned the empty pocket book, asking "Is that all you have?" to which Brooks replied "Yes." They then descended to the

office, where Ellsworth found a package of thirty-five dollars that had come the evening before by express, addressed to a lady in Gallatin. That was also pocketed. Brooks was then ordered to connect his instrument and find out where the trains were, which he did purposely in so awkward a manner, that the Nashville operators became suspicious. Ellsworth then put Brooks under guard, took personal charge of the telegraphing and tried to imitate Brooks' writing.

About seven A. M., Culp, who kept the hotel opposite the depot, came after Brooks to go to breakfast, but Ellsworth concluded that all should go, so he locked the office. Brooks had five hundred dollars up stairs in bed—his first savings. That worried him a good deal; obtaining leave to run up to wash his face, he quickly placed the money in a boot leg, wet his face and returned without being troubled by the guard. After breakfast, Ellsworth resumed telegraphing. Little Jimmy Morris was operating at "NE" (Louisville & Nashville Railroad office in Nashville), Con. Dwyer (manager), Ellis Wilson, S. P. Peabody and the author were running the main city office at this time. Morris mistrusted something was wrong at Gallatin and asked Brooks if he received "that bottle of nitric acid that I sent a few days ago." Ellsworth thereupon turned to Brooks for an answer, at the same time drawing out and cocking his pistol and said he would shoot the top of his (Brooks')—-- —-- head off if he lied about the acid, as the question was clearly a test one. Brooks had indeed, a few days previously, received a bottle of whisky, labelled "nitric acid," to keep the railroad men from drinking it, but had forgotten the label and innocently, but stoutly asserted that he had *not* received it. This Jimmy knew was false, as it had been acknowledged before, and thus he became convinced that Ellsworth was at the key. Little as Morris was, he could command some of the most biting invectives ever invented, and these maledictions he hurled against Ellsworth, who laughed immoderately at them.

At that early hour there was little telegraphing except railroad business. A freight train bound south was captured on arriving at Gallatin. The passenger train for Louisville was ready to leave Nashville. Peabody having told Dwyer that no one could be raised north of Gallatin, the latter asked "GI" if

it was Brooks. The reply came "yes." Q.—"What news have you?" A.—"Everything O. K." Q.—"How is the down freight?" A.—"Here all right." Q.—"Guess not, that isn't Brooks' writing; who is it?" No reply. Calling "GI" again, Dwyer said: "If it's Ellsworth at key, I would like you to protect Brooks." Ellsworth thereupon admitted his presence and said he would care for Brooks, who, about ten A. M., was paroled by a relative of Morgan's. Ellsworth sent two messages to Dwyer, who agreed to deliver them; one was for Ab. Turner, a man not unfamiliar with a leading game, and the other for John Hugh Smith, mayor of the city. The first announced Morgan's success at cards with certain named ones, a few evenings previous; the other reminded the mayor of the time he sought a lieutenancy in the Rock City Guards and was the most boastful Confederate in Nashville and accused him of infidelity. Turner was tickled, but Smith sealed Dwyer's lips.

The next day, after doing great damage, Morgan was driven out of Gallatin, but being hard pressed, he in turn attacked the Federals, numbering eight hundred, under General R. W. Johnson, killing thirty, wounding fifty and capturing about seventy-five, including the commander, after which, he leisurely proceeded to join General Kirby Smith in Eastern Kentucky.

About the same time, Colonel Woodward with nine hundred men, captured Clarksville (August 19). J. G. Webb, operator there, was also taken, but eventually he was unconditionally released and sent to Corinth in October. August 25, Woodward attacked Fort Donelson, where he was badly beaten. He captured and paroled repairer Pyrath and so destroyed the line running to Smithland, that it was not restored until December. During the attack on the Fort, a rebel operator appeared on the line west of the fort. His writing being unfamiliar, operator Griffin at Chaudits asked "134"? meaning, who was at the key, and received the reply, that he was a rebel operator and the "Confeds are now whipping h—l out of the Yanks in Fort Donelson and will be down your way soon and catch you." It is said that Peter Fowler, operator at the fort at this time, did good service with the musket.

While these operations were progressing, H.W. Plum arrived (August 22), at Bowling Green, sixty-four miles by rail north-

east of Clarksville, and forty-five east of Gallatin, a raw recruit to reinforce the Nashville operators. Morgan being on the main road, Plum attempted to reach Nashville by train, *via* the Memphis road to Guthrie, and thence by a short connecting line which crosses the Red River, fifty-one miles from Bowling Green. When within a few miles of the river, a negro hailed the train, and satisfied those on board that the enemy had captured the stockade at the bridge, and were awaiting the arrival of the train; hence it returned, and the next morning Plum was sent without an instrument, to a stockade on the Clarksville line, at the Whip-poor-will bridge, where three companies of the Fifty-fourth Indiana were stationed. Shortly after he had run a loop to the fort, in anticipation of an instrument, the pickets were driven in, and an attack momentarily expected from the enemy, who appeared in considerable force. Accordingly a telegram was sent to the officer in command at Russellville, for reinforcements should he hear cannon, of which there were none in the stockade. The operator telegraphed this message by touching one end of the line to a crowbar, which was driven into the ground for an earth connection. By placing one hand on the bar, and the end of the line in his mouth, he received an acknowledgement. All this took place just outside of the stockade, and in front of the Federals, who were momentarily expecting an attack from the enemy, in plain view. But perceiving the defenders were prepared, the rebels passed on.

A day or two later, Plum was sent to Red River bridge, over twenty miles away, to repair the line. Taking four negroes to work his hand car, he started. That section was notoriously hostile to the Union. The operator was so delayed, examining every bridge before crossing, that it was nearly dark when he reached his destination. On the return, he was thoroughly alarmed by a small party of horsemen who pursued as far as the pike and track ran parallel, firing rapidly whenever within range. When the grade was down, the negroes beat the horses, but when it was up the horses made the best time. At one time, the darkeys proposed to abandon the car and take to the fields, but the operator's revolver kept them steadily and sturdily at work, and long before they expected to reach Whip-poor-will (it being but moonlight), they suddenly drove by the pickets, but

stopped at their demand, expecting to surrender, when, lo ! they were near the stockade, safe. Soon the railroad was re-opened for a day or two, and Plum took the train for Nashville. It proved to be the last one for many months.

Not stopping to note minor engagements with certain of Buell's detachments in Tennessee, let us now inquire into the operations of the main forces, which were considerably scattered, but might easily be concentrated. General Kirby Smith commanded Bragg's right, fifteen thousand strong, at Knoxville, while Bragg, at Chattanooga and vicinity, had under Polk and Hardee, forty-five thousand more, of all arms. Bragg's plan was to induce Buell to expect a battle near Chattanooga, while in fact the former arranged to invade Kentucky, leaving Buell behind. Buell feared Bragg purposed returning into North Alabama, although he regarded a battle near Altamont a possible contingency to be provided for. His ambition was to possess Chattanooga and Knoxville, and thus relieve G. W. Morgan's forces, occupying Cumberland Gap, and join them to his own. Federal occupancy of that region, in strong force, was indeed a *desideratum* scarcely possible to over-estimate. East Tennessee was peopled with hardy, liberty-loving mountaineers, thousands of whom were ready to join the Union army. Chattanooga was connected by rail with Atlanta and Rome, Ga., where much war material was manufactured. Even Chattanooga itself, besides being a great *entrepôt*, was somewhat interested in manufacturing. Situated on the south bank of the Tennessee, which may almost be said to bound the city on three sides, it lies in a beautiful valley that is skirted on the south by the famous Lookout Mountain, and on the east by Missionary Ridge. Across the river is Waldron's Ridge. Thus Chattanooga, as its Indian name indicates, sits like an "eagle's nest," in the lap of majestic steeps. The strong natural positions of Northern Georgia and Eastern Tennessee, once seized by a Federal army, might always remain so possessed; especially as Knoxville and Chattanooga were connected by rail ; and so the sequel proved, but it was yet a long way off.

At this time, McCook's and Crittenden's divisions were at Battle Creek, on the Nashville & Chattanooga Railroad ; Thomas's and Wood's, along the same road ; Nelson's, at McMinnville,

LIBRARY OF THE UNIVERSITY OF CALIFORNIA.

Tenn., and Rousseau's (late Mitchell's, he having been transferred to Port Royal, S. C.), on the Nashville and Decatur road, north of Huntsville, Ala. Rousseau himself had head-quarters in the Cunningham House, in Nashville, where the author operated during Buell's retrograde movement, which began on the 1st of September. A line had been constructed to McMinnville, to which place General Thomas was sent, August 19, to oversee affairs, and Henry C. Vincent and Joseph Humphreys, operators, opened the first office there, in the Cumberland Female Seminary building. Buell moved from Stevenson to Dechard, when a historic correspondence between these two generals took place by telegraph—Thomas insisting that Bragg's object was to enter Kentucky; Buell thinking Nashville was the objective. Nelson was relieved by General Wright, and sent into Kentucky to organize the recruits intended to beat off Kirby Smith, who by this time was about to flank the Gap and move into that State.

Bragg's ulterior designs were so masked that Buell, who wished to aggress, was already on the defensive. By the 5th of September, he had concentrated his forces at Murfreesboro, *to protect Nashville.* The importance of the telegraph to Buell, in August and fore part of September, can not be exaggerated, for his command included the forces at Cumberland Gap. He was also charged with the protection of Kentucky, and expected, if he could not annihilate Bragg's army, at least to hold it in check in the Sequatchie Valley, near Chattanooga, until a decisive battle could be fought. But August 19, Polk's and Hardee's forces began climbing Waldron's Ridge, on their way into Kentucky.

At this time, Buell's forces in hand, not counting possible reserves, equaled Bragg's immediate command. The latter's movements finally developed a settled purpose to invade Kentucky, and then began that great race of the two armies for Louisville, with the Confederates in the lead—a race in which the iron horse and electric tongue figured so potently as to save Louisville and Cincinnati, if not the army itself. Bragg marched rapidly to Carthage on the Cumberland, and thence through Scottsville and Glasgow to the railroad leading to Louisville, which he soon interrupted. While Buell's army is making extraordinary exertions to head off Bragg on or near the Louis-

ville and Nashville Railroad, and Nelson is endeavoring to stay Kirby Smith's approach on Lexington, and General G. W. Morgan is struggling to escape from the Gap, let us examine somewhat into the experiences of the telegraphers in this department. In good time, we will return to the movements of the troops.

The incidents concomitant upon the position of the army operator here, as in all other departments, were variant, scarce two alike, but while the details were always fresh, the general run may be gathered from the adventures of almost any one of them,

DOUGHERTY'S AIR LOOM.

and in view of this latter fact, we have chosen to illustrate the operations of the many mainly by showing the happenings to and doings of one — Kit Dougherty — who entered from Bloody Island (East St. Louis), in May, and was stationed first at Columbia, Tennessee, and next at Moorsville, Alabama. At the former place, this lad of sixteen slept uneasily for the first few weeks, as he was repeatedly routed out to prepare for a night attack by guerrilla bands, but as these scares became monotonous, "Nature's sweet restorer,"

> That supplies, lubricates and keeps in play
> The various movements of this nice machine,

wrought its full benefaction to Dougherty. But his comrade,

Gregory, could not weigh his "eye-lids down," and hence sought repose in the safer State of Indiana. July 4, Dougherty took a celebration ride in the suburbs; his horse fell, throwing the boy about twenty feet over the stone pike, and sending him to bed for ten days. Shortly after he arose, anathematizing horses in general, he was induced to mount a particularly amiable one, and, galloping out of town at an easy pace, the animal gradually grew more spirited, and made desperate but unsuccessful efforts to throw Christopher. Finally the horse resorted to a miserable trick, so well understood on the Western plains, *i. e.*, it shot ahead like an arrow until Dougherty thought the animal had made friends again, when suddenly it thrust forward its stiffened front legs, lowered its head and came to a dead stop. If Dougherty had stopped too, all would have been well, but he kept right ahead, landing on the macadam. Then the *amiable* beast returned alone and Dougherty took another week's rest.

Soon after, he was *en route* for Huntsville, in company, on the train, with Superintendent Bruch. They had proceeded but a few miles, when bump, bump! bang! bang!! The train was ditched and the bushmen were whacking away. It was a moment full of confused scare, and Bruch and Dougherty were surcharged with that sort of confusion. No sooner had they crawled through a window on the off side than the guerrillas sounded their demoniac war-whoop; but not wishing to encounter the train guard, they hurriedly decamped, and the telegraphers took possession of the *field* back to Columbia, exhibiting commendable energy all the way.

For want of other amusement, and chancing to have some copper pennies, Dougherty amalgamated them in the battery room, and among the illiterate farmers they became excellent silver half dollars, much sought after in exchange for watermelons and vegetables, which would have been exorbitantly charged for by the native Secessionists, but for this system of specie payment.

Three trains left Huntsville, August 27, traveling close together; two were laden with troops, the last was to take up the post guards along the road. At Moorsville, the six soldiers and operator were found by the second train on a flat car, with all their truck, including about twelve barrels of mess pork, with

which they made a barricade, that undoubtedly saved the lives of some of the party. The sergeant of the guard missed that train and took the last one. Thus Dougherty became commander-in-chief on the flat car, which was the last on the middle train. Near three P. M., about midway between Pulaski and Columbia, the train was thrown from the track, and a shower of buckshot announced the presence of the enemy in the adjoining woods. The telegraph party, safely ensconced behind the salt pork, had the happy satisfaction of knowing that it was that, not they, that was being well peppered. The attack came from the east and, consequently, the passengers hastily landed on the opposite side of the train, which was used as a protection. A lively fight ensued for about ten minutes, during which time a Federal who was fighting with Dougherty was shot through the brain and fell dead by his side. A lieutenant called for volunteers to reconnoiter. Dougherty and a few others went into the woods to see what had become of the enemy, who had suddenly ceased firing, and while darting from tree to tree the party was again fired upon, and another soldier was shot, whereupon, "having accomplished the object of the reconnoisance," they fell back in good order, bringing off one wounded prisoner and some shot-guns, but, while away, they discovered that the bridge ahead had been burned, and they soon noticed that the one in their near rear was burning. In the language of an eminent military authority, they were "bottled up;" but the last train coming up the next morning with a thousand soldiers and some cotton bales, the latter were used successfully to pass the trains over one stream, the troops being transferred to trains from Columbia at the other bridgeway. The line was destroyed by fastening it about every half mile to the end of the train, which tore off insulators and broke down poles before the line parted. Operator J. A. Fuller came up on the last train. Dougherty was sent to General Negley, whose command was, walking north on the pike. For this march, Dougherty donned his old clothes and sent his better ones by train to Nashville. That was the last he ever saw of them; a very common mishap; for what army operator did not lose at least one *best* suit?

Now let us go back a little and note what the chief operator,

Crittenton, was doing. August 30, he telegraphed Superintendent Bruch, from Stevenson, Ala.:

> Troops withdrawn from Decatur and Columbia route three days ago. Moorsville, Athens, Elk River and Pulaski offices closed. Operators and repairers ordered to Nashville with all telegraph property. Battle Creek taken by rebels; operators escaped. Bridgeport office closed and troops left. Huntsville to be evacuated to-day; Stevenson to-morrow. This will give us no foothold in Northern Alabama for the present. I am withdrawing everything from my section as quietly and orderly as possible.

The next day was full of interest to Crittenton. A wire was run to the fort in Stevenson, and communication opened therefrom to Rousseau's head-quarters in Nashville, and so continued throughout an engagement with an advance force of the enemy. The following excerpt from an article by the author, in 1867, is now in point: "Stevenson, Alabama, was attacked, I think, by General Wheeler. Our lines were still working; the operator had his office in the stockade at that place. In Nashville, we were having a terrible thunder-storm; the surcharged wire found relief in my office every minute; officers flocked there to learn the cause of so much firing; the crack of the escaping lightning was as loud as that of a rifle. Every minute I thought would be the last for my magnets. I inquired of General Rousseau if I should 'cut out.' 'No, sir,' he replied; 'let the instrument burn if it will; I must keep posted about the Stevenson fight.' A minute after this, he was leaning upon my desk, with one hand upon the window sill, when he received a powerful shock. That great strong man was nearly prostrated; he who had withstood the shocks of many fierce battles, was for once demoralized by a single one sent forth by the God of battles. It was a week before he fully recovered."

That night the Stevenson force began its retreat and, telegraphic communication was opened at each bivouac. Then all was quiet on the Southern lines; that whole country had been given up to the enemy, and operators arrived one by one and in twos, in the main, impecunious, ragged and communicative. They awaited developments at the Cedar street office by day and the theater on free passes, by night, until singly or in squads,

they assumed new duties, and then the Cedar street office, like the city itself, was shut off from the world.

While Buell's forces are *en route* from Nashville to head off Bragg, let us inquire into the movements of Federal General Morgan commanding at Cumberland Gap, and also those of Kirby Smith and Bragg. The enemy remained in force within threatening nearness of the Gap during Morgan's stay, but owing to the extreme difficulty of subsisting his troops, Morgan was obliged to forage extensively. One of these expeditions provoked the severe contest at Tazewell, reported by telegraph quite interestingly, as follows:

CUMBERLAND GAP, August 7, 1862.

To COLONEL J. B. FRY, Chief of Staff, Huntsville, Ala.

To obtain forage and feel the strength of the enemy, DeCourcy's brigade was ordered to Tazewell on the second inst. He secured two hundred wagon loads of forage, all of which safely arrived. On the fifth, some slight picket skirmishing took place, in which we had two men wounded, while the enemy had one killed and several wounded. Early on the morning of the sixth inst., not wishing to bring on a general action, I ordered Colonel DeCourcy to return to this post, but he was attacked at daybreak on that day. Considering the enemy's force, the attack was feeble. Two of his regiments surrounded two companies of the Sixteenth Ohio, detached to protect a section of artillery. The enemy's movement was well executed, and had it not been for the coolness and gallantry of Lieutenant Anderson, we would have lost two pieces of artillery. Although surrounded by a vastly superior force, the two infantry companies under command of Captains Edgar and Tanneyhill, fought heroically, and three-fourths of them succeeded in cutting their way through to their regiment, but we fear that Captain Edgar, an officer of great merit, was killed and Captain Tanneyhill taken prisoner. There were several instances of distinguished conduct, both on the part of officers and soldiers. A soldier of the Twenty-Second Kentucky was shot through the neck and fell; his gun dropped from his hand; his antagonist continued to advance upon him, when the wounded hero grasped his gun, rose to his feet, and shot the rebel soldier dead, when within five paces of him; when he again fell weltering in his own blood. Two soldiers of the Sixteenth Ohio had lost their way, and were going toward the

enemy, when Lieutenant Colonel Gordon, of the Eleventh Tennessee hailed them, demanding their regiment; with coolness and courage they required him to declare his rank and regiment; and took him prisoner, reversing their march by a circuitous route, they rejoined their command. Gordon speaks highly of their courage and courtesy. At 3:30 P. M., a courier arrived from Colonel DeCourcy and asked for aid; leaving three regiments to guard the Gap, I marched with my remaining force to his assistance, but when within two miles of Tazewell, I met him on his return. The enemy left the field at five o'clock, and he maintained his position until seven P. M. The enemy's loss is believed to be considerable. I did not pursue, lest a superior force should gain my rear.

(Signed) GEORGE W. MORGAN,
Brig. Gen. Vols. Comdg.

It is said the Confederates lost two hundred killed and wounded, that DeCourcy's loss was much less.

Late on the seventeenth, Kirby Smith struck Morgan's line of communications at Barboursville and Cumberland Ford; that was Sunday; in the morning of that day, Morgan was advised of the movement in this way: Smith's advance cavalry, numbering nine hundred, under Colonel Scott, captured London after a brief engagement with the small command there. This command was posted some distance from operator Frank Benner's office. While Scott was engaged with the Federals, Benner, thrusting his instrument under his arm, hurried off in the direction of Cumberland Gap, and after traveling eight or nine miles tapped the line and telegraphed to General Morgan that the enemy's cavalry, two thousand strong, had that morning taken London. It was a brave and highly commendable feat, and it so chanced that he had just quitted the line, when a squad of the enemy rode by. Benner then struck out for Lexington, Ky., which point he reached just in time to escape Kirby Smith, and was forced to continue his journey to Frankfort and Louisville.

As Smith cut off all hope of supplies by the Lexington route, and Bragg *via* the Cumberland, and as Stevenson's division of the enemy's forces remained south of the Gap to harass foraging parties, Morgan, rather than surrender, decided on the 14th of September to evacuate. His command, ten thousand strong, had been living on scanty allowances for nearly a month. The tele-

graph party was organized under Patterson and Tidd, into a corps of sappers and miners and materially assisted in making new roads, removing obstructions and building bridges destroyed by Colonel John H. Morgan, who harassed the infantry column (G. W. Morgan had previously dispatched nearly all of his cavalry to the North) so greatly as to reduce its means of forage to the *minimum*. For several days the operators and line men lived exclusively on corn grated on a tin plate, through which rough edged nail-holes had been made. On the second day out, General Morgan ordered all but field officers to dismount. Consequently the operators had a long walk. Cassell, the cipherer, was two days behind Morgan on the latter's arrival at Portsmouth, Ohio, *via* Manchester, Booneville, Hazel Green, Grayson, and Greenupsburg, and in consequence Morgan's cipher messages from General H. G. Wright, the commander of the reconstructed Department of the Ohio, which embraced Eastern Kentucky, were delayed, much to Morgan's annoyance, until Cassell could be sent for. The operators with Morgan's command, were J. A. Cassell, Hugh Craig, J. G. Garland and Robert Wagner.

Of course Kirby Smith's wing of Bragg's army pressed vigorously forward. James Jones, the Mount Vernon operator, was overhauled near Perryville by Smith's men, and marched one hundred miles before he was paroled. James Meagher, who barely escaped Morgan's men in July, was, in August, operating at Columbia, where he was captured. W. W. Pitcairn, operating at Somerset, hid from the rebels from August until October 29, when he escaped. The other operators hurried to Louisville. Eastern Kentucky, Ohio and Indiana, day by day as Smith advanced, and report magnified his force beyond all reason, grew more and more excited and energetic. Lexington was Smith's first objective, then Louisville or Cincinnati, perhaps both. Colonel Stager proceeded to Louisville to oversee telegraphic operations. C. E. Bliven was made one of Captain Bruch's assistant managers, and sent to Lexington, the center of his (Bliven's) district. General Wright sent Nelson there also, and there his division, consisting of regiments (except two) scarce a week old, was organized. Time was all-important; both sides realized the fact, for the movement had not been anticipated by

the Unionists, who relied upon G. W. Morgan's forces to prevent such an irruption, and it would have been better that he had destroyed his army in seriously crippling Smith, than render it useless in this trying emergency; but perhaps better still had he followed closely on the heels of his adversary and sought advantageous positions in case Smith turned against him. However, we know not but that Morgan believed a siege intended, until it was too late to overtake the enemy. Metcalf's, Child's and Mundy's cavalry endeavored to retard Smith's advance. Manson hurried to Richmond, twenty-five miles from Lexington, to interpose his and Cruft's brigades. The nearest telegraph office was Nicholasville, fifteen miles distant, where F. C. Cook operated. On the twenty-ninth, word was sent of the enemy's approach in force. The next day, a courier arrived from Nelson, with orders to retire ; but Manson had just been forced back, and was forming for another stand. Again and again, he and Cruft were routed ; then Scott's cavalry struck the panic-stricken fugitives, and all hope of resisting Smith south of Covington, opposite Cincinnati, was abandoned. Fully three thousand Federals were captured, two hundred killed, and seven hundred wounded. Lexington fell, Frankfort was occupied, and a rebel Governor installed. Louisville was incapable of resistance, but, unwisely, Smith moved against Cincinnati, and there the population was all astir, arming, drilling, organizing and digging. Forty thousand men crossed the river with axes, picks and spades. Bliven soon had fifteen miles of telegraph in operation, connecting the fortifications opposite Cincinnati. These lines were operated by John C. Sullivan, E. M. Livingston, Dan. Murray and John D. Richardson. Heth approached (September 15) with twelve thousand Confederates, but dared not attack. That was two days before G. W. Morgan left Cumberland Gap.

Bragg concentrated his main army at Glasgow the day before Smith's advance under Heth appeared before the Covington fortifications, but as early as the ninth, when Salt River bridge was destroyed, railroad and telegraphic communication between Nashville and Louisville ceased. Zeph. Morris, J. D. Weems, Adam Bruch and W. L. Biggert, the "owl," operators in the Louisville office, freed from labors incident to a Nashville connection, were nevertheless now doubly taxed, owing to the great

emergencies rapidly developing. On the twelfth, the railroad between Franklin and Bowling Green was broken. Six days later, Buell concentrated all his forces, not left at Nashville, in and around Bowling Green. On the seventeenth, about four thousand Unionists, at Munfordsville, surrendered to Bragg, who, marching northward, turned north-east near Lebanon Junction, striking Bardstown, ten miles from the Louisville and Nashville road, where a large force was stationed, and, pressing on with the remainder, joined Smith at Frankfort, October 1. Smith and Bragg, by a strange fatuity, had each avoided their great objective when its possession was certain, if they promptly approached in full force.

When Buell's army advanced from Nashville, two operators accompanied each division commander—some on foot, a few in ambulances, and others on horses or mules. Many others were detained in Nashville. Among those who accompanied the army were Bruner and Mullarkey with Buell, H. C. Vincent and W. H. Hartman with Thomas, J. A. Fuller and William Atwater with Crittenden, A. J. Howell with McCook, J. S. Lyle with Woods, William Patterson with W. S. Smith, and Hector Lithgow, G. W. Bliestine, J. H. Galvin and Thomas M. Sampson with other officers. Hartman went with Colonel Kennett from Elizabethtown. Buell, four days' march behind Bragg, entered Louisville on the twenty-ninth, and from that moment the high expectations of the Confederates who hoped to hold Kentucky, became impossible of realization. In Buell's absorbing anxiety to save Louisville he marched far in advance of his main wagon train. Although it was convoyed by a considerable force, both it and the guard were in imminent peril of capture, and no sooner did Buell feel easy about the city, than he became uneasy concerning this train and convoy. Just where it was, he knew not, and the nature of his aid depended upon its position; but he must have known full well, that without reinforcements, being many miles long, it could not pass Lebanon Junction. A small relief force would aggravate the trouble, and a large one he wished not to endanger. In this great emergency, he asked for a volunteer operator to restore the telegraph to his train. Charles Lehr, who had been serving as chief operator of the Cumberland Gap line since Fuller's sickness, was accepted.

Taking four soldiers, dressed like himself, as railroad section men to propel a light hand-car, he started down the road, expecting every moment to see the rebels who scouted to within five miles of the city, but it so chanced that the little party reached Salt River without discovering any. Here, where the iron bridge lay in ruins, they found the first bad break in the line which was soon repaired, and after dragging the car over the *débris*, they had proceeded but two miles when they came in sight of a rebel camp on the left, with a picket on the track. But the men pulled away vigorously. Doubtless, the very boldness of the venture lulled suspicion, as the party passed unmolested. Repairing the line at Rolling Fork and Muldraugh's Hill, the men pushed on safely to Elizabethtown, where they arrived about five, P. M. It was near here that Buell supposed the train would be. Lehr connected his instrument, and getting circuit from Louisville, telegraphically shouted to Bruner, in Buell's office, "Glory to God! Tell Buell I'm here. The train not yet come up." Buell was better off than with his train, for he was practically there, while in fact, forty-two miles away with his army. The train was ordered to turn west to the Ohio River, for transportation by steamers.

The next morning the line was cut, and Lehr and comrades now abandoning the car, set out to return on foot, judging from their unmolested trip down, that a cautious return afoot could be safely made. All went well until near Lebanon Junction, when Lehr chancing to be ahead, discovered about fifty Confederate cavalrymen come out of a neck of woods a short distance beyond. Lehr's assistants ran across a cornfield, but were overtaken and treated as "section men," instead of spies, as they really were; but Lehr, without being discovered at once, ran down a bank along the road, and, while he was pressing forward, the cavalry passed in pursuit of the four others. When he was discovered he was fast reaching the heavy blackberry bushes that grow in abundance in that section, and into which it was not easy to ride. These were well calculated for concealment, and there he eluded the pursuit of two horsemen, who soon gave up the chase. Lehr had spent much time at Lebanon Junction, a terminus of the Gap line, and knew the country and people, which was a great help. Staying that night at a Union man's house, he, next morn-

ing took the road and woods by the road, until coming to the rear of a house on his route, he met a negress, who exclaimed: "Lord, massa, you jest make yourself scace, fo the front room am full 'o rebs." At Shepherdsville, Lehr found a force of rebels which he could not pass by day, so, feigning to be a rebel citizen, he took tea at the tavern by the side of a Confederate officer, and waited for darkness before attempting to pass the pickets, which he safely accomplished, creeping stealthily by. Finally, after other narrow escapes, Lehr reached Louisville, his shoes torn and his clothes in rags. He received congratulations from the Corps, and from Buell himself.

It was after Thomas, who brought up the rear, had left Nashville, that J. N. Crittenton (operator) was directed to go to Buell at Bowling Green; so taking his orderly, he proceeded twelve miles, when he was intercepted by rebel cavalry, and though he succeeded in chewing up some despatches he was carrying, his pocket instrument, watch, horse and other valuables were taken from him, and, seated on a stolen hack, he rode with other prisoners to a log store where, the next day, Colonel Bennett, of the Texan Rangers, paroled all and sent them adrift.

It was well known to the telegraphers that Buell hoped to fight Bragg south of Green River, where the latter for several days offered battle; but when Thomas arrived, Bragg decamped. Expecting Bragg's defeat, and that the lines south would soon be re-opened, some of the operators remained in Nashville until that city was completely isolated. Quarter rations, idleness, high prices and, as a rule, no money, produced unendurable *ennui*. An order from General Negley, the commander, forbidding all persons from being out later than nine P. M., produced an irresistible desire on the part of the operators to keep late hours; consequently, a pass given to a lucky operator served many every night. But when all had finally come into the Cedar street office and lain down on the floor to sleep, the musical *culex* began his lullaby, and the next fellow's boots, pants — anything, everything — were hurled promiscuously for an hour or two until, patience and ammunition ceasing, the boys, *en deshabille*, took to the window sills to smoke and cool off. When morning came, "what a scene was there!"

These things grew monotonous, and S. P. Peabody, Claude

Knox, Kit Dougherty, W. H. Kelsey, F. B. Tyler, C. H. Pond, Joseph M. Humphreys and one other applied to Dwyer, deputy superintendent, for leave to venture north. Out of the United States corrals, containing ten thousand condemned horses and mules that were starving to death, Dwyer selected a mount for each applicant, and one fine morning about the 1st of October, with fifteen dollars each, besides a goodly supply of fire-water, but no bread, they boldly pushed out on the Louisville pike, armed with revolvers and a letter addressed to Bruch, saying:

> These operators are thoroughly disgusted with the war and are anxious to quit the service *forever*. So I have discharged them.
>
> (Signed) Con. Dwyer.

A little below, to be torn off if the rebels were likely to capture the boys, was a word for any Union force they might meet, as follows: "The above was intended only to mislead the rebels in case of capture." Armed with this double-back-action pass, the boys felt reasonably secure. Pond and Dougherty were poorest mounted and soon fell in the rear. About two, P. M., they passed a native, well armed, whose horse looked very like Tyler's; but no questions were obtruded, as it was considered highly impertinent to interrogate an armed stranger about horse-stealing. An hour later, Tyler was espied, trudging wearily in his new shoes, intended for smaller feet. "Hello, Tyler, where's your horse?" "Oh, a gentleman with a double-barrelled shot-gun fancied it. Had to yield to superior arms and overwhelming force, you know." Giving Tyler an occasional ride, the three were about to enter Springfield, when a voice cried, "Halt thar, d—- you!" Five of Dick McCann's guerrillas took the three operators to the Springfield tavern, where they were duly robbed. The pass was discovered *entire* by one of the chivalry, who proceeded to spell it out; but Pond, equal to the trying emergency, volunteered to read the letter, saying he was familiar with the writing, and was allowed to do so. Of course he omitted the fatal *addendum* and was then allowed to retain the paper, which he soon destroyed. The operators were released on parole and moved on. Sleeping in corn-fields, begging something to eat or foraging it, they finally reached Bowling Green, where Martin Barth, operator, gave them a welcome, and in

about two weeks they arrived at Louisville, penniless, ragged, dirty and in summer clothes. The other five operators fared no better. Peabody was usually the spokesman, and an audacious one he proved to be. More years have made him wonder at his temerity. Of course these five were captured and paroled by every band they met. One night, while sleeping in a fence corner, one of the operators was startled by a great snake crawling over him. Shrieking aloud, "My God!" he awakened the others, who were, if possible, more frightened than he.

The following letter from Bruch will explain how poorly the operators fared at this time:

> Nearly all of my operators who have been working in Tennessee and Alabama, are arriving here now. By command of General Buell, two were assigned to each division of his army, to continue with the army as "division operators," to connect their instruments wherever they might come to a telegraph. Moving in this way, most of them have spent all their money and worn out their clothes. Some of them have had nothing to eat for a day or two, and no money to buy anything. They come to me begging and imploring for money, and I can not bear to turn them off. So I have loaned them enough to keep body and soul together for a few days, in hopes that the August funds will be along by the time that runs out.

Among those included in the above, none suffered so severely as H. C. Vincent, who nearly died of fever in a Louisville hotel, for want of proper care.

Cincinnati being safe, General Gordon Granger came to Louisville and took command at Shepherdsville, eighteen miles south of the latter city, and awaited the concentration of Buell's forces north of him. W. H. Drake, who spelled Lebanon Junction for Morgan's operator in July, was still operating there. He was the sole Yankee occupant, but had made friends with his landlord, Harvey Wells, by advising him of the approach of guerrillas, from time to time, so that the latter could hide his horses, and now Harvey advised Drake to "skip," as a detachment of the First Georgia Cavalry, under Hood, was approaching; whereupon, Drake, mounting his charger, hastened to Shepherdsville and informed Granger, who, giving Drake a fresh

horse, made him conduct one hundred men of the Fourth Indiana Cavalry in search of the enemy. Confederates were soon found; they beat a hasty retreat toward Boston, at which place they were run into Wheeler's wagon train, and its guard stampeded. Drake, with eight men, in front of old man Arnot's house, received the surrender of the wagon train and a lieutenant, whose sword, revolver and dirk Drake appropriated. He was just giving orders to burn the train, when, lo! a cloud of dust arose ahead and the tramp of horses from the direction of Bardstown advised Drake to take the swamp road about as fast as his horse could go. Six of his eight men left him at the railroad. They were all killed. At the turn on top of the hill by the railroad, Drake and his two companions came face to face with two rebels, who tried to handle their guns. That frightened him, as well it might, but fortunately he shot quickly, though without hitting, and yelled, "surrender!" which, to Drake's surprise, they did. The prisoners were taken safely to the Junction, where the rest of the Indiana cavalry were, and where Drake left his sword and belt — trophies of his valor — with Aunt Maria, Wells' negress, from whom the lieutenant recovered his property a week later.

Buell, always slow, with one hundred thousand men now in hand, would have been superseded by Thomas if the latter had accepted the appointment. Thus spurred, Buell moved after Bragg at Bardstown, and Smith at Frankfort, October 1st. Bragg and Smith united, and about half past two P. M., of the seventh, the sanguinary engagement at Perryville began. About forty thousand Confederates pressed McCook's corps for hours, when he was only feebly reinforced, notwithstanding Buell had a larger army at command, than his adversary. In that terrible struggle of a few, against the many massed in repeated charges, the Federals alone lost four thousand, three hundred and forty-eight, of whom nine hundred and sixteen were killed and two thousand, nine hundred and forty-three wounded. Bragg conceded a loss of twenty-five hundred men. The Confederates retreated, and the next time they presented themselves they were at Murfreesboro, Tenn., threatening the State capital.

Owing to this invasion, every mile of Federal telegraph in the department, of which there were seven hundred and seventy-

three, was abandoned, besides about three hundred miles of railroad telegraph and say two hundred miles of commercial wire; making the great total of one thousand, two hundred and seventy-three miles of line.

Great was the disappointment in the North at the impotent conclusion of Buell's campaign. He had been directed to move on East Tennessee, but he urged the necessity of going to Nashville, and sent troops to Bowling Green. In this position of affairs General Rosecrans superseded Buell (October 30). The new department was designated as that of the "Cumberland," and the army, the "Fourteenth Army Corps." Captain Bruch's report sufficiently explains telegraphic operations from the time of Buell's advance from Louisville, to his movement on Bowling Green, and is as follows:

When the army advanced to Lexington, we followed it, and repaired lines to Nicholasville in the latter part of October. We also followed the army of the Ohio, under Major General Buell, through Central Kentucky in the same month, repaired the lines and kept him in telegraphic communication until he crossed over to Bowling Green, Ky. The following lines were repaired in his wake: Louisville to Bardstown, Lebanon, Danville, Stamford, Somerset and Mount Vernon, and from Lebanon to Columbia—also Louisville to Bowling Green.

On the 9th of November, just three months from the interruption of the telegraphic communication with Louisville by the destruction of Salt River bridge, the van of the Fourteenth Army Corps, entered Nashville, when the beleaguered denizens and soldiers were rejoiced beyond measure. During the operations in Kentucky, General Negley was left in command at Nashville with about nine thousand troops. Fortifications around the city having been in course of construction all summer, were well advanced when Buell left. Four thousand negroes were impressed to work on them, and their completion followed in apt time. A telegraph line was run to the various forts and military headquarters, and until eight operators were permitted to go North, the lines were open day and night. It was expected that in case of an attack, Negley would be able to direct operations from Fort Negley, that fortress being the key, and commanding

nearly the whole sweep of country, including the city and the river north of it. Nitric acid failing, sulphuric was substituted in the batteries with success. The operators' quarters at the forts were uninviting; H. W. Plum was cozily situated at Negley's handsome head-quaters in the city, Robert Wagner was at Fort Confiscation, the author at Fort Negley, Ellis J. Wilson at General Palmer's and Con. Dwyer had the whole city office to himself. It is due to the worthy chief to say, that but for Major Fitzgibbons, who was *au fait* in all moonlight accomplishments, Dwyer would have known less of the city by candle light.

Provisions were very scarce; foraging parties were regularly attacked by General Anderson's cavalry; Negley was repeatedly summoned to surrender; feigned attacks were frequent, and unpleasant rumors constant. We were awakened at all hours of the night to receive telegraphic orders and transmit information. For forty-five days we received no intelligence whatever from the North. By a Richmond paper we learned that "the troops in Nashville had been compelled to surrender because starvation was threatened," hence we were extremely concerned to assure our anxious friends at home, who oftener than we, heard of our capture, that in fact all was well. General Breckenridge had been directed by Bragg, who detached a considerable force for that purpose, to capture the city. Bragg, from Bardstown, Ky., ordered Van Dorn up from Mississippi to sweep Nashville and Bowling Green, and, after possessing their armaments, unite with Bragg and Smith in holding at least the line of the Cumberland and Tennessee rivers, but he came not.

During the blockade of the city, Confederate General Morgan was reported at Gallatin, Tenn., on the Louisville & Nashville Railroad, and Negley arranged to send General Miller with a brigade by rail at night, to leave the cars at a point two or three miles from Gallatin, and to strike and destroy Morgan's force if possible at daylight. An operator being required for the expedition, the author volunteered. All were aboard by midnight, and the trains moved as quietly as possible to their destination. The artillery was landed and the infantry ready to advance, when General Miller requested the operator to connect his instrument and ask Nashville if all was well. Doing so, he

received a telegram from Major Slidell of Buell's staff, who remained in the city, stating that Nashville was threatened, and Miller must return immediately, which he did with his force and with a heavy heart, to find that it was but another rumor. Thus Morgan escaped. On the fifth day of November, General Morgan attacked the Federals protecting the railroad bridge over the Cumberland, and Forrest and Hanson drove in the pickets on the city side of the river. A section of light artillery opened fire on Fort Negley. Morgan was driven off with a loss of twenty-four killed, and wounded. It was rare sport for those in Fort Negley to watch the rebel shells fall far short of the fort, while the Federal gunners were most perplexed to train their guns so as not to over-shoot the mark. There were at this time about seven thousand Confederates on the south side, which added to Morgan's force in Edgefield, fully equaled the number of the garrison. Breckenridge ordered the retirement of Forrest's and Hanson's troops when they were about to assault, then Negley advanced on the Franklin road, severely punishing the enemy found on that pike.

The day the Federal advance, by forced marches, entered Nashville, the Louisville line was restored to Gallatin, Tenn., by repairers under Bart Brady, and two days after, it was repaired to Nashville. November 24, a second wire was also completed thereto. About the 1st of December, Colonel Bruce recaptured Clarkesville, Tenn., and during that month the line from Bowling Green to Cairo, *via* Clarksville and Fort Donelson, was restored. On the 7th of December, General Morgan captured a force of sixteen hundred Federals, at Hartsville, by the blundering of Colonel Moore and misconduct of his raw troops. On the ninth, Colonel Stanley Matthews' brigade, four times in one day, repulsed rebel General Wheeler's force, attacking Matthews' foraging train, on the Murfreesboro road. December 21, General Carter, with nearly three regiments of cavalry, entered the Confederate lines about forty miles north-east of Cumberland Gap, and struck the railroad east of Knoxville, destroying bridges over the Watauga and Holston rivers, and otherwise greatly damaging the road. Frequent skirmishing occurred between detachments.

"Old Rosy," as his soldiers were pleased to speak of their

new commander, who came to them fresh from his splendid victory at Corinth, held the telegraph service in very high esteem. By his direction, Assistant Manager Dwyer assigned one operator to each division, and two to each wing and the center headquarters. W. L. Tidd organized a gang of builders, to follow Rosecrans, who was preparing to attack Bragg at Murfreesboro. Another party was directed to proceed on the Franklin road, when Rosecrans advanced. The labor incident to the reorganization and partial re-equipment of the army, and repair of the railroad; the accumulation of necessarily vast quantities of quartermaster, commissary and ordnance stores, preparatory to an advance of the whole army, on a new campaign, and the communications to and from Washington, respecting plans of operation, involved an immense amount of telegraphic work, without which Rosecrans could not have moved his army for weeks after December 26, when it began to advance to the scenes of its seven days' battle. Bruner and Mullarkey, Rosecrans' operators, rode with the General, and attended to all telegraphic correspondence. Couriers were in readiness at all times to be sent to the nearest telegraph office. J. A. Fuller was operator with the line builders, and was busy constantly, sending and receiving dispatches.

Rosecrans' effective force was about forty-six thousand men. Bragg, as we have seen in a former chapter, had sent Forrest into West Tennessee, to operate against Grant's railroads north of Jackson. Morgan was in Kentucky on another raid. Kirby Smith's forces, except nine thousand sent to the aid of Pemberton near Grenada, came up from Knoxville, and at the time of Rosecrans' advance, Bragg held at Murfreesboro, or within easy support, thirty-five thousand troops, most of whom were more experienced in war than the Federals.

On the evening of the twenty-sixth, Crittenden's (the left) advance reached LaVergne, half way to Murfreesboro, when telegraphic communication was promptly established with Nashville. Thomas' and McCook's corps continued to advance with Crittenden's, meeting more or less resistance each day, until the thirtieth, when the two armies confronted one another, westerly from Murfreesboro and near the line of Stone River, from which the battle, then impending, is named. A conflict was momentarily expected. Neither party was quite ready, but either

might precipitate it. The telegraph was working to La Vergne, but passing artillery, trains and troops had obstructed the road so that Tidd's building material was advanced slowly. Rosecrans' head-quarters were but four miles in advance, and Tidd strove to reach there that night. Wheeler's cavalry, however, suddenly burst into the village and captured foreman Tidd's entire party, teams and all; burned all the material and private property, and then hastily paroled all but builder Clark, reported missing. Fuller had been busily engaged receiving messages for officers with the army, and forwarding them by a part of the Fourth U. S. Cavalry, serving as couriers. He had just received a message for Rosecrans, notifying him that Anderson's cavalry (a "high-toned" lot of Pennsylvanians) was escorting a large wagon train of ammunition, and advising him to send more reliable troops to keep them company. A courier started with this and other messages, but hastily returned, saying Wheeler had captured a large provision train and was coming to the office. The operator quickly told Nashville; burned the messages he had sent; thrust his instrument into his pocket; mounted his horse, a present from General Crittenden, and rode about five hundred yards and into a regiment of the enemy. Fuller here met the courier above mentioned, who had the telegrams in his possession, but by Fuller's direction he tore them into small pieces. These were scattered about, and created quite a stir among the captors. General Wheeler ascertained that telegrams had been destroyed, and thereupon search was made for the operator, who was dressed in soldier's clothes. Wheeler took the messenger among the prisoners, to identify him, but the courier passed close by Fuller, whom he would not recognize. Failing to discover the operator, the General threatened the courier, when Fuller made himself known. Wheeler then stated that he could not think of leaving the operator behind, to report him the minute his back was turned, and ordered a soldier to mount Fuller on a mule and guard him. This soldier robbed him of thirty-five dollars. Federal Colonel Walker's men now fell upon Wheeler, and, mistaking the prisoners for enemies, fired into them with cannon, whereby Tidd's right arm was struck and shattered by a ten-pound ball. In the confusion that followed the sudden appearance of the Federals, Fuller got the start of

his guard, and succeeded, under fire, in gaining a hospital and closing the door on the pursuing rebel, who hurried to his command. Eight hundred prisoners and all the horses and mules were recaptured. Fuller returned to the line and notified Nashville what had happened.

Each commander had planned to crush the right wing of the other on the last day of 1862; but Bragg's movements were soonest executed, and before Rosecrans had fairly developed his own plan, he was forced to take the defensive to save his army. McCook's corps was terribly cut up, and the Nashville pike so crowded with frightened soldiers, flying from the dreadful scenes that had unmanned them, as to impede the progress of Hascall's brigade, which was seeking to join the main army. Rosecrans' trains were also hastening forward with ammunition and food, when they were checked by these terrified men, some of whom continued their flight to Nashville itself, spreading their terrible stories of the destruction of Rosecrans' army as they advanced, so that every teamster was also ready to fly. That night was full of doubt and dread in the capital city. Evil rumors were repeated and magnified; no comforting reports came from the front. The telegraph office was besieged by anxious officials. The sound of artillery could occasionally be heard, faint and distant. Rebel citizens professed to know of the defeat of the Federals. Late at night came the news that nothing was decided except that Rosecrans had determined to win or die on that battle field. The new year opened ominously, for when the operators were eagerly listening to every click of the instrument on the Murfreesboro line there came a silence, long and burdensome; the telegraph line had given out. What could it mean? Was the army indeed defeated, and would the next report confirm the chilling rumors? How painful is silence under circumstances like these! A fortune for a moment's conversation with the advance operator! But no; the magnet is as still as death. The electric tongue is hushed, and a nation tremblingly waits. How this suspense spreads! The great centers of industry are muffled in impotent anxiousness, as if the sword of Damocles was suspended over them.

Message after message comes from the North, from the President, the War Secretary, the Governors and others, not to men-

tion the cruel speculators, all, all craving news from the front. Then come a great number of telegrams from dear ones, seeking answers which can not be obtained. How terrible, indeed, is war! You, who are wont to recommend it, go read the files of telegrams, full of groans, of tears, of measureless distress, that pass a focal telegraphic point after such a struggle as occurred near Stone River, December 31; then you can count some of the cost, which is not in property alone, not to the wounded or dying alone, but to the whole nation as individuals, all of whom are, sooner or later, wounded in person or by friend. Aye, more; homesickness, fevers, hunger and cold, in the field; sleeplessness, anxiety, which gnaws as a canker worm, and want, at home; these and death are war's ingredients, to comprehend which, in their bitterness, needs sad experience, for they can no more be described than Parrhasius "could paint a dying groan."

At two P. M., of the first, Wheeler and Wharton's cavalry dashed again upon Rosecrans' roadway at La Vergne, capturing part of his trains and scattering the rest in wildest confusion. The telegraph was considerably injured, the operator driven off and his instrument destroyed. This was the cause of that dreadful silence, which every one interpreted according as his hopes or fears predominated. But towards evening, when the panic-stricken teamsters entered the city, stoutly asserting that Bragg's whole army was following, confusion ran confounded, and "What's the news?" was asked only in whispers.

Col. Innis, of the gallant First Michigan Engineers, infused his own valor into his fine regiment, and the rebels who attacked his position at La Vergne were again and again repulsed.

Wheeler's object was to discover if Rosecrans was retreating. The night of the thirty-first had left him twenty-eight guns less than the morning; he had given up much ground. Three thousand wounded and hundreds of Federal dead marked how it had been contested; three thousand unhurt Unionists were captured. Withal, it was a disastrous day to the Federals, but not without somewhat of compensatory injury to the Confederate left. No wonder Bragg was amazed at Rosecrans' apparent obstinacy and stood with folded arms throughout the first, awaiting reports from Wheeler. On the second, Bragg's right, under Breckenridge, charged, driving two Federal brigades off the field too

easily, for other Union troops and fifty-eight cannon opened upon his forces in front and flank and hurled them back in great disorder, less two thousand killed or wounded: thus ended the battle of Stone River. On the night of the third, Bragg retired to Tullahoma, behind the Duck River. His losses in battle, killed or wounded, were admitted to exceed nine thousand, besides over one thousand prisoners, and Rosecrans' casualties were reported as 1,533 killed, 7,245 wounded and nearly 3,000 missing.

Dwyer's brother and James Galvin, foremen, restored the line to Murfreesboro. The evening of the last day of the battle, Rosecrans rejoiced many anxious hearts by his telegraphic report, and on the fifth, having reported the occupation of Murfreesboro, the following telegram was received:

WASHINGTON, January 5, 1863.

MAJ. GEN. ROSECRANS:

Your despatch, announcing the retreat of the enemy, has just reached me. God bless you and all with you. Please tender to all and accept for yourself the nation's gratitude, for your and their skill, endurance and dauntless courage.

(Signed) A. LINCOLN.

To which the General replied, urgently asking the President to furnish that army with a uniform arm, adding that the battle of Stone River was almost lost by reason of the difficulty in supplying ammunition. On the ninth, Halleck telegraphed:

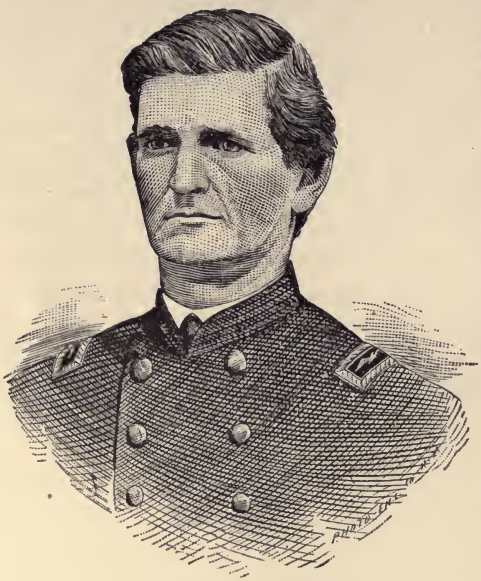
General — Rebel telegrams fully confirm your telegrams from the battle field. The victory was well earned and one of the most brilliant of the war. You and your brave army have won the gratitude of your country and the admiration of the world. The field of Murfreesboro is made historical, and future generations will point out the place where so many heroes fell gloriously in defense of the constitution and the Union. All honor to the Army of the Cumberland. Thanks to the living and tears for the lamented dead.

It was indeed fortunate that the line leading north from Nashville, *via* Clarksville, Fort Donelson, Paducah and Cairo, had been repaired soon after Colonel Bruce occupied Clarksville,

else there would have been no telegraphic outlet during most of Rosecrans' operations, as two days before he left Nashville that, ubiquitous leader, General John H. Morgan, with three thousand riders, again struck the L. & N. R. R. and the telegraph along its route. Crossing the Cumberland once more, he again captured Glasgow (December 24) from which place he raided the railroad, until the twenty-ninth, destroying the telegraph and road for many miles, capturing a number of detachments, posts and stations and quantities of supplies, and finally crossing the Cumberland about Jamestown, returned to Bragg, at Tullahoma. The Bardstown line was also destroyed, and operators Thomas H. Smith and J. E. Nagle driven off. The principal injury to the telegraph, however, was from Bacon Creek to the Rolling Fork, on the main line. Morgan avoided Munfordsville where the Federals were too strong. At this place, James and A. C. Jones operated. James began repairing the line as soon as it was safe; but as many of the poles were cut and burned and the line twisted around trees or hid in the woods or creeks, it was like rebuilding without proper forces and appliances, and hence slow progress was made, but another party started from the north side of the break and met Jones at Elizabethtown, where the connecting splice was made. Among the first messages that passed was a special to the Philadelphia *Press*, giving some account of Rosecrans' success. J. C. Dorchester, operator at General Boyle's head-quarters in Louisville, copied it for the General's information. Boyle gave it to the press, provoking much discussion as to the right of property in such telegrams.

On the ninth day of January, 1863, John Clark VanDuzer, from Grant's department, was appointed Second Assistant Superintendent U. S. Military Telegraphs, and assigned to the Department of the Cumberland, where he found himself once more in intimate official relation with Rosecrans, with whom he had been at, and prior to, the battle of Corinth. So highly did Rosecrans appreciate VanDuzer and the telegraph, that he complimented him with an honorary appointment of captain, and attached him to his staff, but VanDuzer had no actual military *status* until October, 1863, when he was commissioned captain and assistant quarter-master. Captain VanDuzer is one of those rare men who can be familiar with subordinates without detracting

from his proper influence over them. His command was none the less law because pleasantly given. He has been mentioned as the only fighting officer in the corps. The fact is that the officers had, as a rule, but little opportunity to distinguish themselves in that way, but VanDuzer, from the beginning made it a point to share all the dangers incident to the military telegrapher's position on a campaign.



JOHN C. VAN DUZER.

JOHN C. VANDUZER was a New York and New England boy. Born in Erie County, New York (1827), and obtaining a common school education, he early sought that oft-tried and generally successful institution—the printing office—in which to complete his education, and to "finish" it also, probably, for after spending the best years of his eventful life and gaining a splendid reputation as a telegrapher, he now sits in a Northern city, within the sound of his press and mallet, his scissors and paste at one elbow, his exchanges at another, pencil over ear and pen in hand, surrounded by all the paraphernalia of his first business love, and is, perhaps, as happy as when helping Generals Rosecrans and Thomas, Grant and Sherman, conquer peace in Tennessee, Mississippi, Alabama and Georgia. His first experience in a printing office was in Utica, New York, whence he went to another in New Haven, Ct. It was not long after, that he edited and published a country newspaper, in Connecticut. How well he succeeded, we are unadvised, but as we next hear of him at the head of another country paper, back in New York, it is due him to assume that he was about as unsuccessful in his first business

venture as young men usually are. It was while thus engaged in New York, that he learned to telegraph. That was in 1848, a time when newspaper men began to realize the possibilities of the telegraph, which drew to its aid many young men who had already become expert compositors.

VanDuzer easily obtained employment at a small salary, for in those days even skilled operators received less than a beginner does now. But there were few experts. Messages were then received entirely by paper. It was not until about 1846, that reading by ear was thought of, and then its possibility was demonstrated. Nevertheless, until some years later, telegraphing by sound was considered so unreliable that it was prohibited by those in authority. VanDuzer's first office was on J. J. Speed's lines. More lucrative positions were soon open to him, consequently we note his employment next on the Western Union (then a small company) wires, and later on the Erie Railroad lines. It was on this road that the system of running trains on telegraphic orders was introduced first in this country, and the world, by the late General D. C. McCallum, who, in the civil war, managed the military railroads with marked success. At the outbreak of the war, VanDuzer, full of zeal for the Union, and of energy for any good undertaking, heartily responded. We have already noted his services in Missouri, Western Tennessee, Alabama and Mississippi, in all of which he was indefatigable in his efforts to keep the armies in telegraphic communication. His promotion in the service which had so few officers, was as clearly deserved as that of any officer in the corps, and rejoiced his operators who were devotedly attached to him.

Under VanDuzer's direction, the line was re-opened in January, to Franklin, Tenn., where General Gordon Granger was posted, and Ellis J. Wilson operated, assisted in May and June by W. R. Plum. It was June 8, that Lawrence A. Williams and —— Dunlap, respectively colonel and lieutenant in the Confederate service, with forged orders purporting to come from Washington and Rosecrans, presumed to inspect the Federal defenses about Franklin. Their conduct excited suspicion, and the telegraph quickly confirmed it. These officers were, by Rosecrans' order, immediately tried by a drum-head court mar-

tial. They expostulated against being treated as spies. They pleaded for a commutation, but military courts work as sternly as they do quickly. The following messages, received and sent by Wilson, tell the sad story :

MURFREESBORO, June 9, 4:40 A. M.

COLONEL J. P. BAIRD, Franklin:

The General commanding directs that the two spies, if found guilty, be hung at once, thus placing beyond the possibility of Forrest's profiting by the information they have gained.

FRANK S. BOND,
Major and Aide-de-Camp.

FRANKLIN, June 9, 10:30 A. M.

To GENERAL GARFIELD, Chief of Staff:

The men have been tried, found guilty, and executed in compliance with your order.—I am ever yours,

J. P. BAIRD,
Colonel Commanding Post.

It was that kind of justice which was meted out to Andre, but who is there that does not deplore that young officer's fate.

June 10, Granger moved to Triune, half way to Murfreesboro, and his operators were ordered to Rosecrans' head-quarters *via* Nashville. While riding to Nashville, the operators fell to racing, which so excited Plum's horse as to make it positively unmanageable. Rushing on at headlong speed, he came suddenly upon the Brentwood pickets. "*Halt!*" they cried, but to halt was impossible. "HALT!" came again just as the horse passed the line. "HALT!" a last call. "I can't halt," cried the rider. Poor Wilson was too far in the rear to explain. *Bang*, BANG, go the rifles. A bright thought comes to the rider and with all his might he reins his horse against a fence or other side obstruction and the victory is won. It was the same horse that Con. Dwyer attempted to ride in the suburbs of Murfreesboro, but instead of doing so, he went hatless through its very streets, Bunnell, Wilson, Holdridge and Plum trying to keep him in view.

In May, 1863, General Rosecrans, regarding it as extremely important to know the movements of the enemy along the road

leading from Richmond to Chattanooga and Bragg's plans of operation, requested Colonel VanDuzer to select two competent operators for a hazardous undertaking. Frank S. VanValkenburg and Patrick Mullarkey, first-class electricians, who had seen, as we have observed, much military service as operators, volunteered to carry out the General's wish, which was for them to enter East Tennessee, tap the telegraph wires, and copy whatever despatches of importance might be passing. These operators reporting to Colonel William E. Truesdail, chief of army police and scouts, for instructions, were directed to go through the mountains of Kentucky and East Tennessee, to a point near Knoxville, on the Chattanooga Railroad, and ascertain if possible, the movements of the rebels along the M. & C. railroad, and if Bragg was weakening his force to strengthen General Johnston, who at that time was collecting an army near Jackson, Miss., to relieve Pemberton's troops about Vicksburg. After accomplishing that task, the operators were to endeavor to burn the railroad bridge across the Tennessee at Loudon.

Four citizens from East Tennessee, dressed in butternut colored clothes, each armed with a revolver, accompanied them as guides. Taking a small quantity of line and magnet wire, a set of pulley blocks, two pocket instruments and two quarts of alcohol, the latter to be used in firing the bridge, they left Nashville for Lebanon, Ky., where they were arrested by the provost marshal's guard as rebel spies. General Manson furnished them with horses to continue their journey. Stopping the next night at a tavern in Liberty, they were sitting in their room after supper, when startled by the ringing of the bell on the building, summoning the citizens from all directions. Shortly after, a rap at the door caused VanValkenburg to open it. About twenty-five citizens were in the hallway, armed with rifles, shot guns, revolvers or knives. Their spokesman remarked that they were a committee appointed by the citizens to ascertain who the strangers were and where going; that the committee was composed of Union men and they did not propose to allow butternuts to travel south, without satisfactory assurances from them. Looking over the crowd, VanValkenburg discovered a man in the undress uniform of an officer of the Union army, and calling him aside, VanValkenburg satisfying himself of the

officer's loyalty, exhibited Rosecrans' passport and convinced the captain, for such he was, that the party were Unionists. The officer then turned to the committee and said: "Boys, these yere fellers is all right—they be Union men of our stripe." Whereupon, "peach and honey" was indulged in by all.

Somerset was reached the next evening. General Carter supplied fresh horses, and the next day the party crossed the Cumberland River and entered rebel territory. From that time they avoided the traveled roads, preferring the mountain paths and at night reached Jack Harris' house in the mountains, where they remained over night. The next morning, leaving their horses, they journeyed on foot, and that night slept in a hut on the summit of Brimstone Mountain. Descending this the next morning, they reached a point on the Clinch River near Kingston, where their guides left them and went to the houses of Unionists near by, from which they returned with provisions and the information that the country was full of straggling Confederate soldiers of Colonel Flood's Seventh Florida cavalry, which had been defeated in a fight on the Cumberland River. Here they remained until dark, when swimming the river, they proceeded to Parson Harwell's house on the banks of the Tennessee River, close to Loudon, near which place they remained in the woods the next day, being supplied with provisions by the parson's daughters. That night Parson Harwell's son guided them through the woods to a point near John West's house, opposite Loudon, where they remained all day. About ten P. M., they proceeded through the woods to a point on the Knoxville & Chattanooga Railroad between Le Noir and Loudon, about fifteen miles from Knoxville, where the railroad runs through a cut close to the banks of the Tennessee River.

They decided to begin operations here. The line ran on the top of a bluff between the river and the railroad. At the top of the bluff the main line was tightened by pulleys and rope, then cut at the pole and a piece of leather inserted to hold the line in position and break the current. But before severing it, two fine wires were run down the side of the pole farthest from the railroad, and through the bushes down the bluff to a point about midway between the river and railroad. The main line at the cut was then replaced on the insulator so as to hide the

leather except from a close observer. A pocket instrument was soon put in circuit, and the spies were really eavesdropping. Business on the line had mainly ceased for the night. Early next morning they heard the Knoxville operator calling Chattanooga, and not being able to raise the operator there, he commenced testing for a heavy escape which he located between Le Noir and Loudon. This escape was caused by the dew falling on their magnet wires, lying on the bushes. Before the Knoxville operator could start out a repairer, the sun had dried the bushes and the line was clear. The National operators lay at this point all day, copying whatever passed over the wires, but obtaining nothing of importance. That night, the dew falling again, caused a heavy escape. Knoxville located it at the same point, and ordered out the repairer from Loudon on the first train in the morning. As the train passed the operators, they lay concealed on the bluff and saw the repairer with his tools, watching from the rear end. During the first day they discovered a ferry boat that crossed the Tennessee River, also a landing directly beneath them, and from this time on, squads of Confederate troops were frequently crossing to the opposite shore. This cut the party off from water except by night. In the woods on the opposite side of the track, a party of Confederate soldiers were cutting timber for a block house at Loudon. The next morning and every morning after during their stay at this point, Knoxville located an escape between Loudon and Le Noir and ordered out the Loudon repairer. The repairer once reported that he would go out afoot and examine every pole. The operators told their guides that he was coming afoot, when one of them quietly took the rope from the pulley-blocks, made a slip-noose in one end and fastened a large stone to the other. On asking him what he was doing, he replied, "If that fellow comes up here, he will see us; if we let him go, the Johnnies will have us, and inside of twenty-four hours we will have been tried by a drumhead court-martial and the whole six of us sentenced to stretch hemp. Now, it is better, in my opinion, that he should stretch hemp than we six; so, if he comes up here, I'll put this noose around his neck and the first chance we get we will jump him into the river." In the course of an hour, from their position on the bluff, they saw the repairer walking along

the track, examining each pole as he came. When he reached the bluff he stood on the track and looked at the wires attentively for a few minutes, and then went on to Le Noir and reported to Knoxville that the wire was all clear.

Several days after this, they heard an order going over the wires, signed by General Pillow, to the commanders at Le Noir and Loudon, directing them to station men between those two points and search the woods to the river for Yankee spies. This was about three o'clock in the afternoon; they immediately disconnected their instruments, connected the wire through, and, succeeding in crossing the railroad unobserved, they started through the woods, hoping to get outside of the line that they knew would be formed to capture them. They barely succeeded in this. About seven o'clock that evening they reached John West's house and decided to lie concealed in the woods until the excitement should subside. The next day John West brought to them in the woods, a man, who, he said, came to him with letters from Union men in Philadelphia, Tennessee, stating that he was a Union man and was desirous of reaching the Union lines, and requesting West to introduce him to any party of Union men that he might know of going out. West asked them if they were willing to take him with them. One of the guides was well acquainted in Philadelphia and questioned the man closely. Suspecting that he was not what he represented himself to be, after consulting together, they agreed that they should keep him with them for the present, and that one of their party, whose home was in Loudon, should go there and ascertain what he could about the stranger. The next night on his return from Loudon, he stated that this man had been a beef contractor in the Confederate army. Their guides were for disposing of him at once, but, before they had decided what to do with him, it was discovered that he had quietly slipped away in the darkness.

Knowing that it would not be safe to remain there a moment longer, they took to the woods and at daylight reached Parson Harwell's house. That day the parson's daughters rode through the surrounding country, ostensibly calling on their friends, but in reality for the purpose of finding out what arrangements were being made by the Confederates for the capture of the spies. In

the evening the girls returned and reported that scouting parties were searching the houses and that pickets had been placed along the bank of the Clinch River, and that Champ Ferguson, with his band of guerrillas, was searching the woods for them. They decided to try to pass the Clinch River and reach the mountains. That night, about ten o'clock, they started, and reaching the banks of the river they saw the rebel pickets posted to intercept them. Waiting a good opportunity, they quietly slipped past the pickets and swam the river. On leaving the river bank they were greeted with a volley of musketry from a squad of cavalry. The spies immediately took to the woods, the cavalry following the road, hoping to head them off. It passed and repassed them several times, between Clinch River and Waldron's Ridge, they lying concealed in the brush until the cavalry were out of hearing. Then they crossed Waldron's Ridge into the valley, where, just before daylight, they were surprised by a small squad of Champ Ferguson's guerrillas, with whom they exchanged shots. They kept steadily on all that day, confining themselves to the woods and mountain paths, and that night reached a place of comparative safety, near the foot of Brimstone Mountain, having walked fifty-four miles in twenty hours, crossing Waldron's Ridge, Brushy Mountain and Brimstone Mountain.

Mullarkey and VanValkenburg had worn the soles off their boots and were now barefooted. After resting a few hours they again started, and the next day found them at Jack Harris' house, where they had left their horses. Remaining here over night, they started the following morning on horseback, riding all that day. The next morning, about ten o'clock, they reached Union pickets on the banks of the Cumberland River, having been inside of the Confederate lines thirty-three days. The third day after, they arrived in Nashville, completely worn out and ill from fatigue and exposure. Here they learned that the Confederate authorities had been apprised of their visit and its object almost immediately upon their arrival in the vicinity of Knoxville, and that this information had been furnished them by spies who drew pay both from Confederate and Union officers. Colonel Truesdail afterwards informed VanValkenburg that after he knew the Confederates were aware that they were

LIBRARY OF THE UNIVERSITY OF CALIFORNIA

inside of their lines, he had given up all hopes of their returning. And, indeed, had it not been for the aid rendered them by the Union people of that section, they would have been added to the list of Champ Ferguson's victims. Just before the close of the war, at Nashville, VanValkenburg saw hung as a rebel spy, the person who came to them at John West's — the beef contractor and Confederate spy.

CHAPTER XII.

THE TELEGRAPH ABOUT VICKSBURG AND IN WEST TENNESSEE.— THE VICKSBURG CAMPAIGN.— VARIOUS FEDERAL RAIDS.— CHAMPION HILLS.— AFFAIRS ABOUT CAIRO.

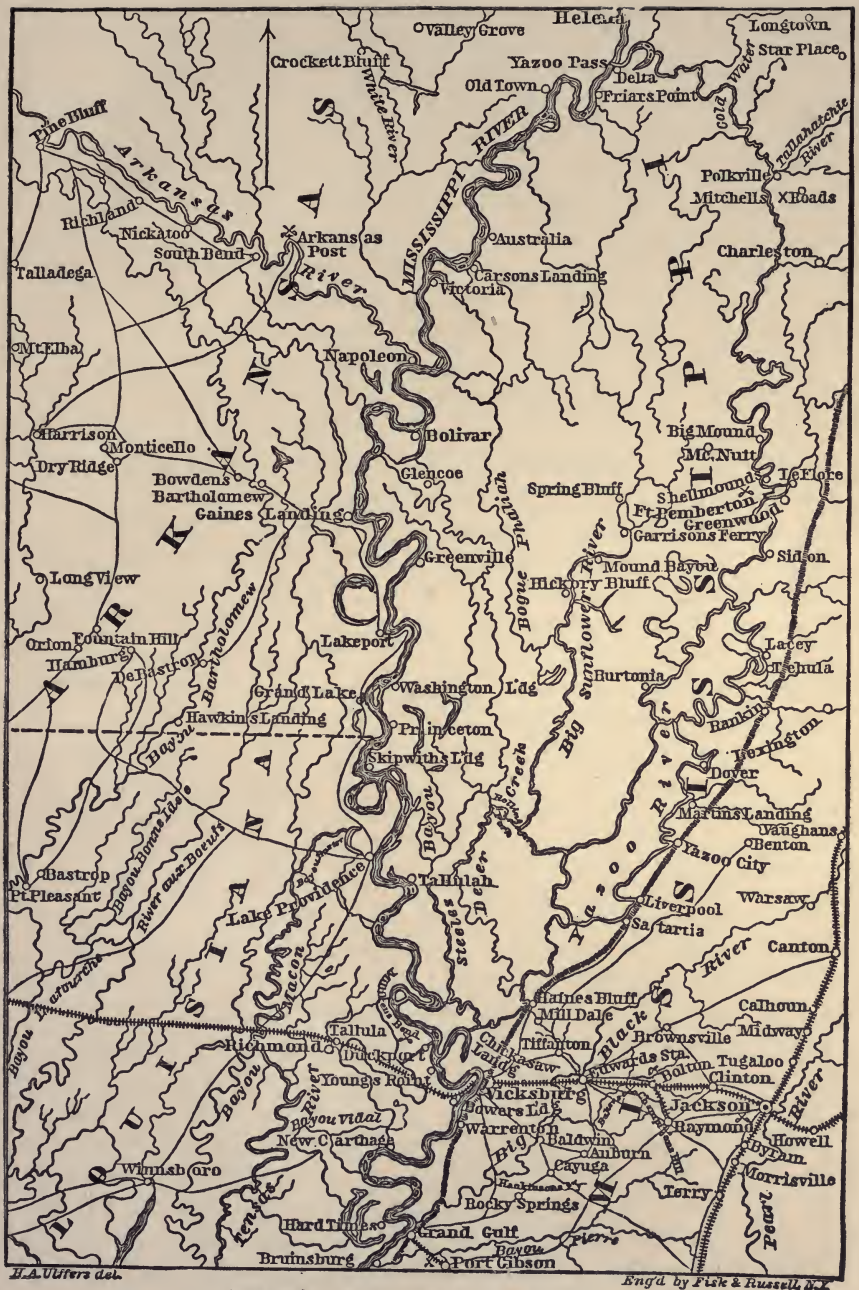
The story of the defense and capture of this naturally strong position, rendered impregnable by artificial obstructions and destructive arms, is one of the most interesting which the annals of war afford. The Chickasaw Bluffs extend full twenty miles above the city, and at Haine's Bluff, twelve miles north, where it shapes the course of the Yazoo and commands its opposite shore, the northern end of Vicksburg's line of defensive works was located. Vicksburg is situated on the bluffs, where they rise about two hundred and fifty feet above low-water mark. Warrenton, six miles below, and Grand Gulf, about sixty miles farther down, are also on the bluffs, which extend south far beyond the sites of Bruinsburg and Rodney.

Besides this great barrier, there were others quite as formidable, and which consisted of the swampy nature of the ground accessible to the Federals; of the innumerable swamps, bayous, creeks, rivers, lakes and impassable roads; of a consequent malarious climate which so bred disease that for miles the river banks, being the only dry ground, were marked by the burial of the Union dead; and of the unusually high stage of the water and frequent rains, which excluded all reasonable expectations of relief in the low regions where the Federals might hope to operate, so as to concentrate east of the bluffs where the country was inviting and of vast material consequence to Pemberton, who had retired to the city from Grenada, on Grant's approach by water.

North and west of Vicksburg for hundreds of miles, the country is so bisected by rivers and streams, as to afford numerous water routes, and by some of them it was believed practicable to flank the defenses north of the city, or by passing below through

others enter the Mississippi south of its defensive works, in which latter event it was proposed to join the Nationals operating in the Gulf Department, and marching north, sweep Port Hudson, Grand Gulf, Warrenton and Vicksburg. Another plan involved crossing the river as near Vicksburg as practicable, and moving to its rear, regardless of the Union forces below, undertake its capture by assault or starvation. Grant was foiled in so many undertakings hereabouts, that not a few stout hearts in his army, including Sherman, advised starting on a new line from Memphis, but that, it is said, would have sadly affected the *moräle* of the troops, for Grant, with superior forces, would then have no lines in advance of what they were when Halleck left the army, in July, 1862, and the North bowed down by defeats, might not have submitted to Grant's longer remaining at the head of this department. General history should be consulted for the details of his unsuccessful ventures hereabouts,. It must suffice here, to outline only their general character. January 30, 1863, Grant took personal command of the forces operating against Vicksburg, amounting to fifty thousand men in hand, leaving a larger number behind him, variously posted in his department. Three plans to reach the rear of Vicksburg were under experiment at once, each of which had its enthusiasts. One was to cut a canal, one and one-fifth miles long, across the neck of land which, on the west side of the river, projects to a point a little above Vicksburg. This canal was to be dug just beyond the reach of the city batteries. By it, it was hoped to divert the waters of the Mississippi away from Vicksburg, thereby rendering that city of little consequence, or at least enable Grant to pass below and feed his army while operating from the south and east. But the enemy erected batteries lower down on the bluff, so as to command the southern end of the proposed canal, and a sudden rise flooded the peninsula; either of which causes would have made the scheme abortive.

Another project was to connect the river with Lake Providence, about seventy-five miles above Vicksburg, and thence *via* bayous, or rivers, reach the Red River, and, follow that down where, some one hundred and fifty miles below Vicksburg, and about midway between Port Hudson and Natchez, it enters the Mississippi. This scheme involved a concert of action with the



THEATRE OF VICKSBURG OPERATIONS.

LIBRARY
OF THE
UNIVERSITY
OF
CALIFORNIA.

Army of the Gulf, but it was found to be too big a job, and of doubtful utility if opened, owing to the scarcity of transports small enough to navigate the streams.

A third design was to flank Haine's Bluff, by a water route, beginning a little below Helena, Ark., but on the eastern side, and by cutting the levee, enter Yazoo Pass, which connected with the Coldwater, Tallahatchie and Yazoo Rivers. Gunboats and transports by this route reached Fort Pemberton, situated at the mouth of the Yallabusha, but were unable to capture it. This fort was about three hundred miles from the levee mentioned. Sherman and Admiral Porter tried to aid this expedition by a roundabout way into the Yazoo from Young's Point, near Vicksburg, avoiding Haine's Bluff, but after crawling along the Muddy, Steele and Black bayous, something like one hundred and fifty miles, they returned without reaching the Sunflower, where they would have had water enough.

These experiments are said to have been useful in inuring the army to hardships, but as it experienced no subsequent severities equal to the lessons, they should be set down as gigantic failures, which cost from disease alone a fearful sacrifice; nevertheless it would be unjust to pronounce censure, as they were plans which could be determined only by their trial, and depended greatly on the elements. War is largely experimental. These routes were respectively advocated by able engineers, and all of them were possible under favorable circumstances.

Finally, after two months of engineering, General Grant had recourse to a westerly roadway, miles of which were corduroyed for the purpose, whereby he marched McClernand's and McPherson's corps to Carthage, some thirty-five miles south, where were met some of Porter's gunboats and transports, that had run the gauntlet of the Vicksburg batteries, and thence moving past Grand Gulf, Grant crossed the river near Bruinsburg, and possessed Grand Gulf after defeating Confederate General Bowen, at Port Gibson. Grant thereupon ordered Sherman's corps, which had been engaged in a diversion, to follow, while he (Grant) pressed on toward Jackson, Miss.

Leaving Grant to concentrate his forces, let us take a hasty glance at affairs farther north. Several expeditions were sent

out in the winter and spring of 1863, from the Memphis and Corinth line ; one, under General Dodge, into North Alabama, in conjunction with Colonel Streight's (of Rosecrans' command) unfortunate raid into Georgia *via* Tuscumbia, Ala. John O. Ingle, operator, accompanied Dodge on this expedition. Two others were sent in February ; one, being under General A. J. Smith, accompanied by Lew. Spellman, operator, and a second under Colonel Grierson, with whom was operator Fred. W. Snell. Yet another one, vastly more important, under Grierson left La Grange a few days before Grant started for Carthage. Grierson's force consisted of about seventeen hundred cavalry, and was to destroy as much of Pemberton's communicating railroads and telegraphs as possible, and also such stores, munitions, and the like, as he could. His success was remarkable. Luke O'Reilly, operator, who accompanied him, was of valuable assistance by telegraphing, at captured offices, false reports of Grierson's movements. One of O'Reilly's tricks, that troubled the Confederates a great deal in restoring their telegraphs, was to leave the line apparently intact, but in fact held together by some *non*-conducting substance, so inserted as not to attract attention. This force proceeded through the State of Mississippi and finally reached Baton Rouge, La. It caused Generals Pemberton at Vicksburg, and Gardner at Port Hudson a great deal of trouble. They were so perplexed at Grierson's movements, that they could nowhere oppose him with any force competent to prevail against him. All of Gardner's telegrams were captured at Port Hudson subsequently. The last two, preserved by operator W. A. Sheldon, of the Gulf department, are significant. They are as follows: Gardner to Pemberton, "Grierson has arrived at Baton Rouge. How did he get through?" Pemberton to Gardner: "I don't know, do you?"

General Johnston, commander of the Western armies, was at Tullahoma, Tenn., with Bragg, when Pemberton telegraphed the fact of Grant's new movement, and thereupon, he (Johnston) set about to collect forces to aid in beating off Grant. On the 12th of May, he reached Jackson, but the Federals had come between there and Vicksburg, hence Johnston and Pemberton could not attack in concert, and Pemberton felt too weak to

stand alone, although May 16, he valiantly attempted it at Champion Hills. So Johnston evacuated Jackson and Pemberton, unwilling to risk a decisive battle, fell back fighting, into the city, where his troops were quartered by the 17th of May, when the siege began and with it, the arduous duties of the army operator, as the desperate assaults of the nineteenth and twenty-second had proven a siege inevitable.

John C. Sullivan, who relieved Ira G. Skinner as chief operator with General Grant, accompanied the latter to Milliken's Bend and remained chief of telegraphic operations in the Vicksburg district until some time after the capture of that city; Captain Fuller remaining at Memphis. April 20, Grant, in view of his movement, ordered a line built from Milliken's Bend to Carthage *via* Richmond, La., but owing to the road being used to transport supplies and the difficulty of procuring transportation, Solomon Palmer, foreman of builders, made slow progress and it soon becoming undesirable, the construction was abandoned. May 24, Palmer was ordered to erect a line connecting all corps head-quarters, which was accomplished by the twenty-seventh; operator Ingle going to McPherson's, E. H. Johnson to McClernand's, and M. K. Booth, newly detailed from the Ninety-Third Illinois infantry for that purpose, was sent to Sherman's. June 2, Palmer built a line from Grant's quarters to Chickasaw Landing, seven miles, and thence to Haine's Bluff. Operators were so scarce, that searchers were sent through the army and Sherman's office was temporarily closed to let Booth go to the Landing, where all the supplies were received. General Osterhaus repaired the line to his quarters at Black River, on the railroad, when he became clamorous for an operator. Hudson H. Allen was detailed for that office about the twentieth. June 19, the line was extended on the left to General Lauman's, and on the twenty-third, to Herron's, where Beckwith was stationed. Beckwith had just arrived from above, having been serving Generals Lee, at Germantown, Brayman, at Bolivar, Dodge, at Corinth, and Hurlbut, at Memphis. These Vicksburg lines aggregated forty miles in length; that from Haine's Bluff to Big Black was to advise the forces near those points of any approach by Johnston, who was collecting an army to relieve Pemberton. G. W. Baxter was stationed at Haine's Bluff. June 26, W. H.

Parsons, Edwin D. Butler and Stephen L. Robinson arrived, barely escaping a masked battery on the banks and a fire on board, and the next day, a line was built to Parke's head-quarters at Post Oak Ridge, eight miles beyond Haine's Bluff. Butler was sent there, Robinson went to Lauman's, and Parsons temporarily relieved Booth, who had become very sick. Beckwith went to Grant's about the 1st of July, and Robinson to Herron's. The operators, by the 4th of July, were completely exhausted, their work being very exacting, especially as to time. Many successive nights they barely slept at all, and were of course at their instruments always in the day time. Finally some relief was obtained by making the couriers awaken the operator every time the instrument made a noise; by this means snatches of sleep were obtained, but a great and glorious end was approaching.

Pemberton's defense of Vicksburg was in many respects both able and gallant, but considering his force; that he held interior lines, and the natural difficulties of an assault, the wonder, is not so much that he successfully repelled all attacks as that he attempted to stand a siege with insufficient provisions. Grant's audacity might have been less manifest had he not greatly underrated Pemberton's real strength, a thing officers are not likely to do, and Pemberton might have been less reluctant to obey Johnston's early orders to attack, had he not overestimated the forces then in hand with Grant. Although the soldiers could not successfully storm the enemy's Vicksburg defences so as to penetrate them in force sufficient to effect a permanent lodgement, the lack of the necessities of life soon became evident to all within the city, and frequent desertions enabled Grant to keep generally advised of the stores on hand. The question of Pemberton's surrender became, with the siege, but a question of time, it would seem, with both army commanders, unless General Joe Johnston succeeded in collecting an army sufficiently strong to relieve the besieged. Plans for cutting a way through the Federal lines were indeed discussed in Vicksburg, but no such attempt was made. Johnston was indefatigable in his labors, but Grant's forces and works behind the Big Black increased, so that he felt measurably secure, while Sherman, Washburne, Parke and Osterhaus were on the alert along the defensive rear,

from the Yazoo to the Black River bridge. Johnston, about the last of June, reached Brownsville, near the Federal defenses. On the 27th of June, there came a report that Johnston was to be quickly reinforced by ten thousand troops from Bragg in Tennessee, and new assaults were being considered by Grant, but the commander of the half starved defenders was poorly advised of Johnston's operations. Mines had been sprung and others were in preparation; Federal shells were falling in all parts of the town and its citizens were dwelling in caves.

Surrender was felt to be an inexorable necessity, and accordingly, on the morning of the 3d of July, Pemberton proposed an armistice with a view to arranging terms of capitulation. By this time, Beckwith had come to the relief of Sullivan, whose cipher and telegraph duties at Grant's had been of the most trying nature. Ordinarily Beckwith's telegraphic manipulations were mechanically accurate and steady, but now that his news was the harbinger of an ultimate success which would crown the Army of the Tennessee with unfading laurels and shower upon it the tearful blessing of millions who were, and the loud acclaims of millions yet unborn, he nervously signaled "22"* and "OS,"† repeatedly and then began calling the operator of Washburne's head-quarters up the Yazoo; at Generals McPherson's, Ord's (he having relieved McClernand), Osterhaus', Parke's, and elsewhere, all of whom, alive to the meaning of the signals, and doubtless believing an attack was impending, hurriedly responded. Beckwith then telegraphs, "Big news ! ! ! Pemberton sends flag of truce; wants to know terms, if he will surrender. Grant going to meet him ; give you more soon." Then followed the orders to desist firing, and the hills about Vicksburg, for the first time for months, ceased to echo and re-echo the voices of war. It was truly big news. Grant returned about four P. M., and telegraphed some of his chief officers to meet him, to consult as to the terms which should be offered. Almost at the same moment, Steele, McPherson, Ord, Lauman, Logan, Herron, Blair and some others started for Grant's. The council over, the terms were submitted, amendments proposed but rejected, and about two A. M., Pemberton's reply, accepting the *ultimatum*, was received.

*A signal for precedence and importance. †Signal that the matter is for all offices.

How opportune, indeed; for while these negotiations were progressing, Johnston was steadily moving toward the Big Black and had actually placed one gun into position. Reports of scouts were frequently telegraphed from Washburne and Osterhaus, announcing the approach of this new army. Grant's anxiety lest he should have to let go his fast hold on the great prize, to crush this new army, was very great. His own army was now seventy-five thousand strong, Pemberton's, thirty thousand, and Johnston's exceeding twenty-five thousand; but with them concentration on single points alone invited success; with Grant, to concentrate was to loosen his hold on Vicksburg. Minutes became hours and hours, days, while the terms were under discussion, but with a firm reliance in his brave troops, perhaps in the God of battles, Grant rejected Pemberton's amendatory terms, and then Pemberton acquiesced. It was this acceptance that brought Grant into the telegraph tent at two A. M., of July 4, saying, "Well, Beckwith, they have accepted our terms, and now I want Sherman. Can you raise him?" It should be stated that Sherman was temporarily relieved of the command of his corps in front of Vicksburg, on the 20th of June, and sent back to command the forces anticipating Johnston, and at this time (morning of July 4) his head-quarters were at Parson Fox's, between Haine's Bluff and the railroad bridge. Operator Butler at Parke's, who had gone to sleep with his head in a cracker box, on the top of which rested his instrument, having, so to write, one ear open, was soon aroused, and Grant's message to Sherman, stating that "Pemberton has accepted and will surrender to-morrow morning," was duly despatched. Other messages speedily followed to all commanders, and on the anniversary of our nation's birth, the army made, says Badeau, in his "Military History of U. S. Grant," "*The largest capture of men and material ever made in war.*"

On the fifth, most of the operators moved into the city, where they established an office at Grant's and in a bank building, and while Parsons, Johnson, Baxter and Robinson were for(a)ging through the iron doors of the bank, only to discover an old clock and some duelling pistols, Beckwith, who had secretly learned of the burial just over the Black of eighty thousand dollars in plate and coin, together with a member of General

Matthias' staff, rode out to possess it. In their anxiety, they ventured too quickly, and were nearly captured by four rebel horsemen, but other Federals coming up by a by-way, the Confederates rode off. When, on another day, the treasure was sought, somebody had carried it off.

No sooner was the capture of Vicksburg assured than Admiral Porter started his fleetest steamer for Cairo, carrying a detailed account, with all of the prefixes and affixes possible in the address and signature. The steamer reached Cairo two and a half hours ahead of the next one. The pompous naval officer strutted into the telegraph office and demanded possession of the wire to send the news of the capture of Vicksburg to the Secretary of the Navy; but while the receiving clerk was counting the long message, preparatory for sending, the manager rapidly telegraphed without transcribing, as follows:

To Colonel Stager, War Department, Washington:
Pemberton surrendered July 4.
(Signed) A. J. Howell.

It was this laconic message that enabled Secretary Stanton proudly to spread over the land the news of a glorious victory by the time that Secretary Gideon Wells had adjusted his spectacles to read the message that Porter had striven so hard to send him, so that *he* might have the honor of reporting it.

This news was not so readily believed in the Confederacy. At Delhi, forty miles west of Vicksburg, whither Lee S. Daniel had retreated and where he was operating, General John G. Walker threatened him, on the fifth, with irons for stating a belief that the place had fallen, and on his telegraphing the fact on the eighth to Eldorado, Arkansas, the operator there soon advised Daniel to fly, as a *posse* of citizens had organized to go and hang "that lying operator at Delhi."

Among the Confederate operators found in Vicksburg were A. Grimes and E. L. Marchant. Grimes was a talented Irishman, who served many years as operator at Jackson, Lake Station, Vicksburg and vicinity. Marchant also worked at Jackson and subsequently in New Orleans. At the close of the war both took the oath of allegiance and were employed by the Government. They are both dead.

The following telegram will indicate Sherman's undertakings:

HEAD-QUARTERS EXPEDITIONARY ARMY,
FOX'S, July 4, 8 P. M., 1863.

GEN. GRANT, Vicksburg:

Your despatch, announcing the magnitude of the capture of Vicksburg, is most gratifying. The importance of the place to our cause can not be exaggerated. I have left Kimball's division at Haine's Bluff, with instructions to picket at Oak Ridge. I will order General McArthur to relieve Osterhaus. I will relieve Osterhaus at the bridge to-morrow, so that Osterhaus may report to General Ord. Three bridges will be built to-morrow at Birdsong, Messinger's and the railroad crossing. To-morrow I suppose Ord and Steele will be up, so that next day I will cross and move in force on Bolton. The enemy show one gun opposite Messinger's this P. M. I am willing he should meet us at once; the nearer our base the better. If he declines battle I will follow promptly at Clinton; then I can discover if Johnston is scattered or contracted, when I will act accordingly. I have not yet heard if the prisoners are to be paroled here or sent North. The farmers and families out here acknowledge the magnitude of their loss and now beg to know their fate. All crops are destroyed and cattle eaten up. * * I feel an intense curiosity to see Vicksburg and its people, but recognize the importance of my present task and think of nothing else. I will keep a few orderlies at Osterhaus, which is now my nearest telegraph office.

W. T. SHERMAN,
Maj. Gen. Comdg.

Robinson pushed out with Ord and opened an office at Clinton on the twelfth. Parsons and Ingle footed it from the bridge to Clinton, seventeen miles, in the rain, on the thirteenth, when General McArthur gave the boys an ambulance to Sherman's, two miles from Jackson, at which place Johnston lay entrenched. It was well for Ingle that he rode in an ambulance, because at Clinton, where a drug store was sacked, he filled a pocket with capsules, which proved to be loaded with croton oil. It was after ten o'clock when they reached Sherman's quarters, and found him sleeping in a fence corner, but on hearing of their arrival, the line having been repaired by Palmer, Sherman wrote many telegraphic orders for troops in the rear, besides reporting

to Grant. July 16, Confederate cavalry attacked Matthias' troops at Clinton, cutting the line, but were driven off, and the next day, Jackson was evacuated and as soon as Sherman directed it, the line was run into that city, *i. e.*, the twenty-first. Johnston was in full retreat and Sherman moved back to Messingers Ford, west of the river, where Parsons opened an office on the twenty-seventh. Ingle went to Haine's Bluff, William Foley, fresh from Cairo office, Baxter, Johnson, and H. W. Nichols, who was captured at Holly Springs and H. H Allen, were now ordered to the Gulf department.

The siege of Vicksburg had passed into history. Six whole months had been spent in its capture. Such victories do not come without sacrifices. That Grant's army was willing to incur any danger, is shown by its labors on water routes, by its marches of two hundred miles in twenty days, by its battles, by its deprivations and by its engineering approaches under the very guns of Vicksburg, but above all, by the miles of silent graves which indicate the ravages of disease, and by the killed (one thousand, two hundred and forty-three) and wounded (seven thousand and ninety-five) in battle. A peace purchased at such a price should indeed be lasting and fruitful; but no, not yet.

Among those fallen heroes, the Telegraph Corps counts one of its own number. Marsden K. Booth, eldest son of G. J. Booth, of Fulton, Ill., was born April 20, 1844, in Dundee, Yates County, New York. At the early age of thirteen years, he learned to telegraph in Fulton, and operated at Geneseo, Palatine, Harlem and Sterling, Ill., but though in fact too delicately organized for severe exposures, he was deeply impressed with the conviction that his duty bade him to shoulder arms. Accordingly, August 9, 1862, he joined Company F, of the Ninety-Third Illinois Volunteer infantry, sharing its fortunes and its miseries until detailed from the trenches in front of Vicksburg as above shown. In that sanguinary struggle known as the battle of Champion Hills, where four hundred and twenty-six Federals were killed and one thousand, eight hundred and forty-two wounded, and the Confederates lost between three thousand and four thousand, killed and wounded, the Ninety-Third lost many of its brave soldiers and nearly all of its officers, but young Booth was destined to aid in the capture of the west-

ern Sebastopol and then succumb to a malarial fever. The telegraph office at Chickasaw was in a tent on the bank of the Yazoo, whose motionless, slimy, green and tepid waters exhaled miasma that was unusually poisonous, especially in July and August, when the waters are low, stagnant and warm, and full of decaying vegetation. Besides this poisoned air and the foul waters of the Yazoo, Booth was so over-tasked, as to be wholly unfit for work, two days before Parsons relieved him, but in a large measure Grant's whole army was dependent upon the telegraphic orders affecting the transportation and disposition of the stores that were landed near the office, and Booth with the zeal of a martyr remained steadfast until relief came; but, fatal necessity; it cost him his life, and on the 25th of August, at the age of nineteen years and a few months he died, and was buried where his remains now lie, in the military cemetery at Vicksburg. One of his comrades writes that "he was a kind, uncomplaining young man, a genial companion and his death was mourned by those who were so fortunate as to have his acquaintance."

On the 17th of August, General Grant received some of his military friends. Certain officers took the occasion to present him with an elegant sword, after which, General McPherson, a constant friend of the army telegraphers, presented him with a superb pair of major general's shoulder straps—(he having been recently appointed a major general in the regular army)—together with the following letter:

HEAD-QUARTERS 17th ARMY CORPS,
Vicksburg, August 17, 1863.

MAJOR GENERAL J. B. MCPHERSON:

General—May I beg the honor of requesting you in behalf of the operators in the field, to present the accompanying pair of major general's shoulder straps to Major General U. S. Grant, as a token of respect and esteem. Should you deem it proper to present them this evening, I beg you will communicate to the General the sincere gratitude which we entertain toward him for the many kindnesses extended to us. I am, with profound respect, etc.,

Yours, S. H. BECKWITH,
Opr. Gen. Grant's Hd.-Qrs.

In war, the scenes are constantly shifting. A section once conquered and thought to have passed from the panorama of contending armies, suddenly reappears crimsoned with fresh misery, and the strife as before, has its ebb and flood tides, until finally one party again controls the domain. Then follows the peace of the grave and forage of the living; so it was in Virginia and West Virginia, in Missouri, Arkansas and Louisiana, and now also in West Kentucky and Tennessee, and so the strife continued to recede and advance again, along the border shores of the rebellion, until from sheer exhaustion, the weaker side in despair, ceased its depredating raids almost as suddenly as they were begun. When Grant quit Holly Springs, for Milliken's Bend, the Confederates' flood tide again set in, and it is to relate the incidents occurring in West Kentucky and Tennessee during the year 1863, of consequence to the telegraphers, that we now busy ourselves. W. G. Fuller, in his annual report for the fiscal year ending June 30, 1863, says:

March 9, 1863, the railroad from Jackson, Tenn., to Columbus, Ky., was abandoned. All the garrisons withdrawn, and the offices closed, but by a judicious system of sending repairers in disguise, to travel over the lines on foot, we were enabled to keep open communications, more than half of the time, although guerrillas constantly cut them. The repairers did their labor in the night. June 8, Jackson and Bolivar, Tenn., were evacuated by our troops and the offices closed at those points, but the line continued to work through from Memphis to Cairo up to June 14, when it was cut so badly by guerrillas, that we gave up the hope of continuing it longer. T. P. Hemphill, who had been doing repair duty upon this long line of unguarded wire, with three soldiers, who were assisting him, was killed by guerrillas. The lines north from Grand Junction and from Corinth, were abandoned, and the direct line from Grand Junction to Corinth was rebuilt. The troops heretofore garrisoning the railroads along which these lines extended, had been sent to reinforce General Grant at Vicksburg.

Thomas P. Hemphill, from Carlinville, Illinois, volunteered to go with a train to repair the line which the rebels had torn down. He started from Grand Junction on the morning of June 15. The rebels had cut the underpinning of a bridge near Middle-

burg, Tennessee, and when the train struck it, the whole was precipitated into the ravine. Hemphill and three soldiers were instantly killed and twelve others were badly injured. Hemphill was so badly mangled as to necessitate his burial on the spot. Two weeks before this the rebels captured all of his clothing.

Whoever was in Cairo during the war, will agree that it was an abomination. According to Dickens, Martin Chuzzlewit was one of the early proprietors there. It was then

> A flat morass, bestrewn with fallen timber; a marsh on which the good growth of the earth seemed to have been wrecked and cast away, that from its decomposing ashes vile and ugly things might rise; where the very trees took the aspect of huge weeds, begotten of the slime from which they sprung by the hot sun that burnt them up; where fatal maladies, seeking whom they might infect, came forth at night in misty shapes, and creeping out upon the water, hunted them like specters until day; where even the blessed sun, shining down on festering elements of corruption and disease, became a horror. This was the realm of Hope through which they (Martin and his partner) moved. At last they stopped — at Eden, too. The waters of the deluge might have left it but a week before, so choked with slime and matted growth was the hideous swamp which bore that name.

When the author first saw it, in June, 1863, the streets were without bottom and the walks were on stilts. Sometimes a gutter intervened between the imaginary side lines where the street proper terminated and where the walk began, but as a rule it was all gutter. More attention was paid to bad drainage there than he ever noticed elsewhere. Everybody discussed it except the authorities. There was liquid in front, at the side and beneath the city; even the citizens were in liquor. Mr. Rollins, member of Congress from Missouri, speaking of Cairo, said his steamboat landed passengers in the third story of its first-class hotel. In the very heart of the new city the cry of the faithful boatman is "No bottom." Of another occasion, S. S. Cox writes: "Another member remarked that Cairo was one of the rising cities of this Union; to which, 'Has it risen above high-water mark yet?' was the apt response." Coffin, in his "Four Years of Fighting," describes the place as he saw it:

The mud can not be put into the picture. There was thick mud, thin mud, sticky mud, slushy mud, slimy mud, deceptive mud, impassable mud, which appeared to the sight, to say nothing of the peculiarities that are understood by the nose; for within forty feet of our window were a horse stable and pig yard, where slops from the houses and washes from the sinks were trodden with the manure from the stables. Bunyan's Slough of Despond, into which all the filth and slime of this world settled, was nothing beside the slough of Cairo. There were sheds, shanties, stables, pig-sties, wood-piles, carts, barrels, boxes — the *debris* of everything thrown over the area. * * There were truckmen stuck in the mud. * * This was Cairo — delectable Cairo!

Except the St. Charles Hotel and the theater, perhaps, the saloons transacted the only successful local business; nearly all of the business men were successfully employed. The similarity of occupations doubtless made business licenses cheap; anyhow, almost everybody had one. The walks were so unsteady that the police were constantly arresting people on charges of inebriety; it was a *fine* way the authorities had for increasing the city treasure. Thus the main business brought the city a steady income at both ends of it. The devil there wept for joy. Cairo was sometimes called the jumping-off place. It is certain that Satan obtained a foot-hold there; whoever had that was a fixture, and as Old Nick had no boots to leave, he may be there yet. The decaying boots and other putrescent garbage emitted exhalations without stint. They maintained an individuality, which to the uneducated olfactory, was observable only in its force and effect, but to an *habitué*, distinctive odors were perceptible. Thus Gross reported one hundred and forty-five varieties observable during a walk from the hotel to his telegraph office. During the war there were three places there carrying on independent business; one was the St. Charles Hotel, which had a large till and a small waiter; another, the Varieties, which afforded a weak diversion between strong drink; and last, the telegraph office, which was up two flights of stairs, a whisky shop being on the first floor and a billiard saloon on the second, through both of which patrons passed but to emerge at the head of the stairway in a dark, dirty, unfinished rear room of 50 x 25, littered with insulator blocks, old ladders, boxes, barrels, empty

carboys, wire and the like. A door opened from this room into a middle one, 15 x 25, where Grove batteries poisoned the air; farther on, was the office, which had been a lodge room, but was now partitioned for the operators to sleep and work in.

Is it any wonder that every operator who ever stopped there soon sickened? that in a few short months Ashley, Gross, Hill, Parsons, Egan, Schermerhorn, May, Merkley, Peterson, Howell, Culbertson, O'Neil, Mullarkey, Foley, Walsh, Peel, Craig and others either went to Mound City hospital, home or the Yazoo country to recruit? Think of the place as pictured by Richardson of the New York *Tribune* about this time: "*Cairo*, a nondescript, saucer-like, terraqueous town. 'The season here,' wrote John Phœnix, 'is usually opened with great *eclat* by small pox, continued spiritedly by cholera, and closed brilliantly with yellow fever — sweet spot.'" No wonder Fuller wrote Bruch in September, 1863, "I can not get a suitable man that will take that office. Every one that I mention it to says emphatically, "*No, sir!* leave first." George Gallup tried it, subsequently, without success, but after him came a wonderfully constituted telegrapher. It was none other than W. T. Mason, who, remarkable as it may seem, continued the management of Cairo office to the end of the war, and still lives.

W. W. Forbes and W. R. Plum, then at Murfreesboro, Tennessee, volunteered to assist the exhausted operators at Vicksburg, but on arriving at Cairo, Colonel Stager, who was there, insisted that one should stop there and the other at Columbus, Kentucky, where J. V. Hill was very sick. Forbes refused and resigned, but Plum chose the unseen, and telegraphing General Asboth, commanding at Columbus, to have the post surgeon in readiness, he started for that place; scarcely had he landed before the doctor was called.

Colonel Stager had been sent to Cairo, where General Buford, a brave and gallant officer, commanded. It seems that Chicago and St. Louis papers actually published accounts of important military operations about Vicksburg, in advance of Secretary Stanton's knowing them. Colonel Stager was sent to stop the leak, for somebody was making money or obtaining newspaper puffs in return for reliable information. Colonel Stager found

that despatches from below reached the telegraph office through head-quarters, but he did not discover the offender. However, the leak ceased when arrangements were made for the delivery of messages from the steamers to the telegraph manager. Subsequently, telegraph clearances were given at Memphis and Cairo, to all steamers, of which the following is a sample blank:

CAPTAIN ——— ———,

Master Steamer ———.

No steamer is permitted to leave ..... without this clearance. W. G. FULLER, *Capt. and A. Q. M.*

No telegraph despatches being now in this office for which your boat should be detained, you are at liberty to pursue your voyage at any time before — o'clock —. If detained beyond that hour, this clearance is void, and you will report again at this office when you are ready to leave.

By order of Major General C. C. Washburn.

W. G. FULLER, *Capt. and A. Q. M.*,
Asst. Supt. Mil. Tel., Dept. Tenn.

NOTE.—All steamers are required by existing orders to report at the military telegraph offices at Cairo, Ill., and Memphis, Tenn., and to receive and deliver promptly all Government despatches.

A line was built along the railroad from Union City to Hickman, Ky., in April. In June, the troops were withdrawn for Vicksburg. Edwin D. Butler, operator at Hickman, closed his office and went with the troops. William Foley closed the Union City office, and soon after also reached Vicksburg. It was well for these operators that they left with the troops. General Asboth remonstrated, and George M. Brush, at Clinton, near Columbus, consented to take his chances at Union City. During June, an effort was made to re-open the line to Memphis, notwithstanding the country to Grand Junction, from Columbus, was unguarded. Jacob V. Hill, operator, started with a train and handful of men, on the fifteenth, and reaching Trenton, he was informed of rebels in close proximity, but ordering the train ahead, he proceeded one mile south, where he discovered cavalry picketing the road, whereupon the engine was reversed, but the rebels fired about twenty-five shots without damage, and received a like compliment from those on board. A month later the Con-

federates advanced in considerable force, capturing Brush at Union City, taking possession of Hickman, and driving Hill and all the Federals at Columbus into the fort there. Repairer Rutherford was captured outside and held ten days. Brush was stationed at Union City as a sort of advance picket to Columbus, and bravely did he do his whole duty, for although the cavalry dashed into town early July 10, before they effected his capture he called up Columbus office, and sent a telegram to General Asboth, explaining that the town was occupied by the enemy in large force, thereby enabling Asboth to make ample preparation to receive them. Some way the captors found out that Brush had advised Asboth, and hence the partisan soldiers having him in charge abused him shamefully, even threatening to hang him, but some officers removed him from their hands. His subsequent sufferings, however, were very great. He was taken to Richmond, Va., where, claiming to be a commissioned officer he was placed in Libby Prison, instead of Belle Isle. He remained eleven months in this prison, and was allowed to correspond with friends in the North and receive aid from them, but the prison authorities, finding he was not a commissioned officer, sent him to Andersonville. "He who enters here leaves hope behind." On his leaving Libby, the guards taunted him, and took from him his blankets, money and some of his outer clothing. When he left Andersonville, he was clad in an old blouse and a pair of drawers. He was exchanged at Savannah, Ga., about December 1, 1864, after near a year and a half imprisonment, but how altered! He was crippled with scurvy. His face, wan and haggard, was so changed that his friends at home (Carbondale, Ill.), did not recognize him. It was nearly a year more before he was sufficiently recruited to go to work again. Then he went to Kansas, and thence to Texas, but while visiting at home again in 1873, he was cruelly murdered.

Early in May, a new cable was laid at Cairo, and the line extended from Blandville to Columbus. R. B. Griffin was operating at Blandville, where there were no troops. But it was an important, outpost office, and the point where the line from Paducah intersected, so that in case the direct line gave out, that *via* Paducah could be connected. Late in October, the guerrillas

entered Blandville by one road, while Griffin who heard of their coming just in time, escaped by another, but his telegraph property was all captured. Griffin soon returned to duty again. A few days later (November 6), Colonel Faulkner sent a squad of bushwhackers to Blandville, to destroy the office and capture the operator and repairer, but on the night the guerrillas appeared, and just before they entered, Griffin received a note by a colored servant from a young lady who had become attached to him, saying that Faulkner's men were coming that night to capture him, and that he had better hurry away. This was quickly telegraphed the commander at Columbus. A young man, a citizen of Blandville, was Griffin's bedfellow, and as Griffin decamped without giving notice, this young man was terribly surprised on being pulled from bed by the hair and dragged down stairs that night, some of the captors shouting, "Kill the —— Yankee operator," but the landlady, who was the lad's mother, came to his rescue and convinced the marauders that the operator was not about. However, they captured Griffin's horse and instruments. November 11, he reported: "It was impossible for me to save the property, as General Smith requested me to remain at my post as long as possible, when he was aware of my danger." This state of affairs continued until General Paine arrived at Paducah, when he issued orders charging the citizens with the protection of the telegraph, and threatening their freedom and their homes if the lines or operators were molested.

On the Memphis and Corinth line, the guerrillas and regular forces were even more annoying. The lines in West Tennessee were repaired for the most part by the use of hand-cars, with which all repairers were supplied, and it was no uncommon thing for the repairer to be ditched by the way. General Hurlbut had so denuded this line of troops for Grant, that guerrilla parties were very bold. We have already noted several expeditions from the line of the M. & C. R. R., and will now merely add a telegraphic report to General Halleck of another:

The cavalry force from LaGrange, on the thirteenth (August), under command of Lieutenant Colonel Phillips, Ninth Illinois infantry (mounted), reached Grenada seventeenth; drove Slemmons,

with two thousand men and three pieces of artillery from the place, destroyed fifty-seven engines, four hundred cars, the depot buildings, machine shops, several blacksmiths' shops, and a quantity of ordnance and commissary stores, and captured fifty railroad men and a number of prisoners. * * (Signed) S. A. HURLBUT.
Major General.

We do not know what operator accompanied Phillips.

CHAPTER XIII.

THE TELEGRAPH IN ARKANSAS AND MISSOURI IN 1863.— HELENA.— LITTLE ROCK CAMPAIGN.— OTHER CAMPAIGNS AND CONFLICTS IN MISSOURI AND ARKANSAS.— AN OPERATOR HUNG.

As affairs in Arkansas in 1863 were closely allied with those in and about Memphis, it is befitting now to fix our attention upon the military and telegraphic operations in that State; and inasmuch as Arkansas was in Major Smith's territory, and the Little Rock expedition, about to be mentioned, was composed, in part, of troops belonging to the Missouri Department, it will be found convenient to include in this chapter a statement of operations generally, under that department commander, and Smith, the telegraph superintendent.

Retrospectively, it should first be noted that the very day that Vicksburg surrendered, General Prentiss (B. M.), located at Helena, Arkansas, with thirty-eight hundred Federals, well posted in forts and other defenses, was attacked by the Confederates with wonderful vigor. General Hurlbut, commanding the Memphis district, telegraphed the result as follows:

HEAD-QUARTERS 16TH ARMY CORPS,
Memphis, Tenn., July 5, 1863.

TO MAJOR GENERAL HALLECK, Washington:

General Prentiss was attacked in force by rebels under Holmes and Price at Helena, yesterday. He estimates the force at fifteen thousand; I think nine thousand will cover their strength. Prentiss sustained their attack until three P. M., from daylight, when the rebels were repulsed at all points, leaving twelve hundred prisoners. Their loss in killed and wounded is about from five to six hundred; Prentiss lost about sixty. He has already sent me eight hundred and sixty prisoners, whom I send to Alton to-day on "Silver Moon." He has asked reinforcements; I have sent him the One Hundred and Seventeenth Illinois; I can not spare any more. The enemy

are closely picketing everything south of my line, and seem strong. I have no fear of my position unless Johnston turns north, but am unable to spare men from Memphis, which I hold with an effective force not four thousand strong. * * *

S. A. Hurlbut,
Major General.

Very soon after Pemberton's army was paroled, Grant directed General Hurlbut to organize an expedition against Little Rock, to start from Helena, and to this end added to Hurlbut's territory "so much of his (Grant's) department in Arkansas as lies north of the Arkansas River." In a cipher telegram (July 28) to General Schofield, whose head-quarters were at St. Louis, Missouri, and who was co-operating, Hurlbut wrote: "Kimball's division,* six thousand infantry, with three field batteries, are now or will be in a day or two at Helena, ready to move upon the rear of Price, and co-operate with you. * * * * I wish at once to know your plan and probable course of operation, and means of supply. * * I dread the results of a march through that desolated country at this season, especially as I * * have no certain knowledge where Price's force is to be found," and again, "I shall probably send Major General Prentiss in charge of the expedition;" but General Grant sent General Steele.

General Schofield started General John W. Davidson, from Missouri, with six thousand mounted men and eighteen field guns, to reinforce Steele. Steele started early in August. The White River, always navigable by small boats, was at this time very high. Four gunboats were ordered up to Jacksonport, where Marmaduke was reported to be. As soon as these movements were noticed, General Kirby Smith hurried to Little Rock, determined to defend Texas from that point, and was reported to have brought up his troops from Louisiana. Fortifications were begun on the road leading into the city from the east. The scattered forces and partisans, under Price, Holmes, Marmaduke, Cooper and Cabell, were rapidly concentrated at Bayou Metoe, their left resting on Brownsville, creating alarm to Hurlbut, who telegraphed Schofield and Halleck that at least another brigade should be sent to Steele. To Halleck he sug-

* Sent from Vicksburg.

gested a movement of forces from Rosecrans' army, in conjunction with troops from Corinth, against Johnston's right flank, so as to clear that section as far down as Columbus, Mississippi, in which event Hurlbut could spare five thousand more men for Steele, but Steele himself did not expect a stand to be made north of Arkadelphia. The gunboat expedition was a success, capturing rebel steamers "Kaskaskia" and "Tom Sugg," and destroying the bridge over the Little Red River, with a loss of two killed and five wounded, August 20, Hurlbut started another brigade *via* Helena to reinforce Steele, and heavy Parrott guns were ordered from St. Louis, but probably not sent. With this brigade, Steele would have had fifteen thousand men and a full supply of field guns; but the water was higher than since 1844, and in places four miles wide, besides, the high temperature created so much sickness, it is reported, that within a few weeks seventeen hundred men were in hospitals. This must have been confined mainly to the infantry, as Davidson wrote Schofield from near Clarendon, August 9: "My troops are in fine condition; men, horses and transportation are better after a march of three hundred and fifty miles than when they started." September 2, Steele reported from Brownsville that he had pushed a party to within fifteen miles of Little Rock; that he would either turn the works at Bayou Metoe on the north and west, or move rapidly across to Pine Bluff, on the Arkansas, crossing the river and advancing on Little Rock from the south side, which was wholly undefended, making Napoleon his base of supplies. The latter plan was substantially adopted, the army striking the river at Ashley's Mills, where Davidson had a brush with the enemy. About this time, General Grant started John E. Smith's division (four thousand strong, with two batteries) from Vicksburg, to reinforce Steele; not only did they not arrive in time, but Steele was forced to leave one brigade of infantry and a regiment of cavalry behind to guard the sick and trains. It was well that Kirby Smith's troops had not yet arrived. Nothing daunted, Steele and Davidson pressed forward, fighting at the crossing of Bayou Fourche, on the tenth, and that evening entered Little Rock with flying colors, which shone brightly in the light of the six burning steamers and other property fired by Price, the commander, who retreated to Arkadel-

phia, from whence he was also driven soon after. Thus a rich cotton country, south of the Arkansas, was opened to speculators, and the State nearly cleared of regular Confederate troops.

While these things were progressing, the telegraphers were not wholly idle. About the middle of August, General Schofield ordered Major Smith to send a party to Memphis to construct a telegraph line from there to Little Rock. River soundings for a cable were made at Memphis, but General Hurlbut could not protect the builders from the guerrilla parties, who swarmed along the route, that of the Memphis & Little Rock Railroad, so the party was ordered to begin at Helena. General Steele was so pressed for troops, which were supplied by water, that he could not maintain land communications, and that project fell through. About the middle of October, the men proceeded to DuVall's Bluff with one hundred miles of wire and transportation. J. H. Black was chief of the builders, who to the number of twenty, reported with assistant foreman, George Allen. Dwight Byington, chief in the operating department, soon came, and with him were Theodore Holt, R. Hec. Smith, Edwin J. Waterhouse and George B. Allis. Lines were constructed in October and November to the important dependencies upon Little Rock, *viz.*: DuVall's Bluff, *via* Brownsville, forty-seven miles, Pine Bluff, forty-five miles, and Benton, twenty-five miles; total, one hundred and seventeen miles. Byington and Smith operated at Little Rock. Holt first at Little Rock; afterwards at Benton and DuVall's Bluff. Waterhouse at DuVall's and Brownsville, and Allis at Pine Bluff. One of the first things to be done to make the lines serviceable, was the killing of guerrilla chief Cotter, which was soon effected, to the great joy of the repairers. Engines and cars were taken by water to DuVall's Bluff and the Little Rock end of the railroad worked.

Black deserves a description. He had been a sea captain and in his voyaging, learned the French and Spanish languages, but notwithstanding his acquirements, including an easy, fluent speech and graceful demeanor for a man of fifty-five, the boys persisted in speaking of him as that "rough old tar." It was his sea-faring severities of speech that they named him by. A New Yorker by early education, a "salt" by practice, a river-water-

logged craft by necessity, and a land-lubber by force of circumstances; fat, jolly or rough, as occasion required, an excellent imitator and caricaturist, he was very loquacious and a lover of claret. He it was who built those Arkansas lines.

Preparations were now making to extend the telegraph to St. Louis *via* Fort Smith and VanBuren, Ark., and Springfield, Mo. At this point it is best to digress enough to discover the state of affairs in Missouri and North-west Arkansas, whereby such a line became possible.

THAT "ROUGH OLD TAR."

We have, in a former chapter, followed Curtis from Missouri to Batesville, and thence to Helena. Before he left Batesville, Ark., General J. M. Schofield, already familiar from experience, with the whole State, was (June, 18\ placed in command o\ a department, including Missouri. Price's Confederate emissaries had recently returned from his army to their respective homes in most parts of the State, and with that zeal which is actuated by a sense of duty *plus* assurances of reward, they recruited bands in all parts of the State. Their efforts were unintentionally abetted by Schofield's zealous labors in organizing a State militia, of which he had on paper within a few months, the names of fifty thousand men. Every citizen therefore, within the conscript ages, was obliged to take arms for one side or the other, and consequently very many, who otherwise would have remained passive, actively espoused the Secession cause. This brought the conflict of arms into numerous villages in the State and for a time paralyzed all industries outside of St. Louis. No State in the Union ever experienced six consecutive months

of such misery, but the militia system was incalculably beneficial in the end. Poindexter, Porter, Cobb and other Confederates less prominent, recruited several thousand men north of the Missouri, while Hughes and others on the south side, collected many more. The Federal forces were subdivided, leaving commanders J. M. McNeil in the north-east part of the State, Ben. Loan in the north-west, James Totten in the center, E. B. Brown in the south-west, Lewis Merrill at St. Louis, and J. M. Glover at Rolla. In June, Schofield's available forces numbered seventeen thousand. McNeil struck Porter's raw recruits, three thousand strong, August 6, in Adair County, completely destroying the organization, killing, wounding and capturing many. At the same time Poindexter, with a smaller force was near by, but separated by the Chariton River. He too was attacked, his force dispersed or captured. Poindexter himself was overtaken alone in the woods. The Missouri crossings were guarded so that no considerable force could cross either to escape south or aid those on the left bank. The citizens in North Missouri to a man having pronounced for or against the Union, in the culminating struggle, that section was pacified as never before since the outbreak of hostilities, and henceforth, there was comparative safety for the operators along the Hannibal & St. Joseph and North Missouri Railroads.

South of the river, affairs were less promising, especially as General Hindman, commander in Arkansas, had raised a force which, considering the sparsely settled regions of his command, seems almost incredible, being variously placed at forty thousand to fifty thousand men. The capture of arms intended for this army was one of those fortuitous events little dwelt upon by historians, but which may have saved Missouri, not even excluding St. Louis, to the Federals. Nevertheless leaving a considerable force in Little Rock, Hindman reached the Ozarks with full twenty thousand armed men. Before this, however, Hughes had collected a thousand recruits and (August 11) captured Independence, near the Kansas border, dispersing most of its Federal defenders. Coffey and Quantrell coming into the State, joined Hughes, and (August 15) defeated Colonel Foster, who had eight hundred men, and two guns, but Schofield was concentrating upon them from the east, west and south, wherefore

they abandoned the State. It is said that from April to September, over one hundred combats occurred in Missouri.

Schofield was now able to protect the State by concentrating at, and south of Springfield, having by the 1st of October, four thousand, eight hundred infantry and five thousand, six hundred cavalry, and sixteen guns at Springfield, and three brigades out on the Newtonia road. General Blunt came over from the west of Kansas with about four thousand Federal Indian and white troops, a portion of which Indian Federals, had recently defeated a Confederate force of red men in the Indian Territory. Schofield, leaving about five thousand men to protect his communications, joined Blunt below, and thus, though now nominally superseded by Curtis at St. Louis, he had ten thousand troops in hand to contend with Cooper's seven thousand Confederates, besides General Rains' six thousand, which were about the Pea Ridge battle ground. There were yet other enemies east of these. After a partial success, Cooper moved to Fort Wayne, where (October 22) Blunt whipped him without killing any to speak of, and his own force, four thousand strong, had only three men disabled. Rains, unable to reach Cooper, kept out of the way of the Federals, who, however, did succeed in striking a detachment of three thousand horse near Fayetteville. Blunt hearing that Marmaduke was about Cane Hill with seven thousand men, expecting Hindman, with a view of destroying the former before Hindman came up, attacked him October 28, with five thousand men and thirty guns, driving him back to Cane Creek, where Marmaduke's position was virtually unassailable.

In December, Hindman and Marmaduke united their forces, aggregating eighteen thousand troops. Except the forces with Blunt, there were now no Federals closer than near Springfield, where Herron succeeded Schofield, and now had six thousand infantry, eight thousand cavalry and a complement of artillery. It was Hindman's best policy to destroy Blunt, and then move into Missouri. Blunt's position was extremely critical, as he was about six days' march from Springfield. Hindman's army succeeded in gaining the rear of Blunt's forces, but Herron, by forced marches with four thousand troops, attacked the enemy near Prairie Grove, losing nearly one-fourth of his command, and would have been overwhelmed, but for the timely arrival of

Blunt with reinforcements. The Confederates lost about three thousand, of whom nearly one thousand were slain.

When we last invited the reader's attention to this section, we stated that the telegraph which had been extended toward Bentonville was abandoned south of Cassville, and after Curtis left, taking with him operator Luke O'Reilly, whom he attached to his staff, Springfield became the most southerly office. At this point, operator W. H. Woodring arrived in June, after another lonely ride, this time all the way from Rolla, barely escaping capture by a dozen woodrangers when near his journey's end. General Brown assumed command there soon after. J. B. Morgan, of the Fourth Iowa infantry, an ex-operator, wounded at the battle of Pea Ridge, after convalescing, was sent to the aid of operator G. H. Peck, at Springfield, and remained with Woodring after Peck left, until about the 1st of July, when he was sent to Waynesville, and Cassius M. Barnes, who had rendered valuable service in Farmington, Miss., and Brittons and Moscow, Tenn., came from the Jefferson City, Mo., office, to Woodring's assistance. When General Schofield arrived, Charles A. Paxson, accompanied him as operator. Lucien J. Barnes, Cassius' brother, an ex-telegrapher, Assistant Adjutant General on Schofield's staff, frequently assisted in the office. Lucien, early in the war, opened an office in East St. Louis, for the transmission of very important messages from Captain (since General) Lyon, as Lyon was suspicious of some operators then in the commercial office in St. Louis. Just before Schofield started south, as related, C. M. Barnes went to St. Louis, and Henry G. Briggs, of the Ninety-ninth Illinois regiment, also an operator, was detailed to assist Woodring.

Early in January, 1863, Marmaduke, collecting about four thousand troops, mainly horse, and avoiding Blunt, prepared to assault Springfield, his base of supplies. Herron having taken away the best troops with him, leaving under General E. B. Brown but about twelve hundred militia, three hundred convalescents and one hundred and fifty Iowa troops, the result was very uncertain. Brown's few cavalrymen delayed the enemy as long as possible, to give time to prepare for the battle. Several old iron howitzers, that lay in the arsenal grounds, were put on temporary carriages in the little earth fort about a block from

headquarters, and manned by experienced gunners. By daylight of the eighth, Brown was ready.

Early in the morning of the seventh, the telegraph line was cut, both east and south, to prevent Brown from communicating with outside forces. The night of the seventh was clear, the moon shining brightly, and, realizing the great necessity of re-establishing the telegraph before the attack, operator Woodring called to him repairers Owen Monday, a splendid man with real Irish pluck, and Bob Bates, who would go wherever sent. Monday mounted his big claybank, and going east found and repaired the line about seven miles out, and returned before daylight, undiscovered; but Bates had to go farther, and did not find the break until near morning. Having repaired the line and rested a little at a wayside house, he was unable to return until the rebels had begun their attack, which commenced about one, P.M., when suddenly he found himself in the midst of a squad some distance out of town, where the road on both sides was skirted with brush and timber. Being in citizen's dress, no immediate measures were taken to detain him, and soon comprehending the situation, he spurred his little mare directly into the timber, when the squad sent a volley after him without effect. Bates finally reached the town before it was closely invested. Telegraphic communication being thus re-established, the operator was able to and did advise the Commanding General at St. Louis, of the progress of the battle during the whole of the time it continued. This will doubtless be discredited by some, but the same thing was done in Tennessee when the author was at the safe end of the line. Other instances occurred in that and other departments, especially that of the Potomac. R. Von F. Truenfield, of London, Eng., author of "*Krieg's Telegraphie*," (1879), who has given the subject of War Telegraphs, perhaps, greater thought than any other writer, and who was actively engaged for five years in the late war between Paraguay and Brazil, as manager of army telegraphs, had somewhat similar experience. Captain Buchholz, another German author, doubts the use of the telegraph on any battle-field, but the American instances are very numerous.

Woodring and Briggs felt little disposed to remain idle within a few blocks of the fighting, and as each was well supplied with

Enfield rifles, they sallied forth to render such service as they might. Briggs took position among the volunteer skirmishers, and Woodring, acting now as aide to Brown, anon firing from convenient shelter, at short intervals ran back to his office and telegraphed prospects. At one time, peeping over a parapet for a shot, he drew a heavy rebel fire, that was almost too well aimed. At another, while he was in his office just after dark, lighting his lamp, preparatory to reporting that General Brown was severely wounded, there was a sudden crash through the building, already well riddled by bullets. The room seemed to fill with splinters and powdered plaster, and ere he could comprehend what was the matter, he saw a dark ball rolling on the floor *right by his* feet. It was a shell from the enemy's cannon. Greatly startled, he jumped back and crouched in a corner, awaiting its explosion, but happily for him the fuse had not ignited. That shell passed through a wooden church and three partitions in the telegraph building before reaching the office where it struck a brick chimney and and fell to the floor It is now the property of Superintendent Smith. Woodring hurriedly arranged his wires, and, taking out a relay, went to a building facing Market Square, where the office was formerly, and there he made his report to St. Louis.

About eight o'clock, the enemy withdrew, and Springfield was saved. About one, A.M., the Union gunners fired again, to feel for the enemy, and Woodring, believing the battle was being renewed, reported accordingly, and then the line was cut again, leaving the Department Commander, at St. Louis, and the Northern people, in suspense. Marmaduke had taken the Rolla road, cut the wire in many places and strung it across the highway behind, as he advanced.

Since two, P. M., no tidings had come from brave Briggs. Let us now follow him. In company with a lieutenant and a few others, he took position behind some shade trees, not far from the two story brick seminary building, lately used as a military prison, which the enemy captured, and from which they were inflicting much injury. Briggs and the others were endeavoring to pick off some of the enemy, and in so doing he fired every cartridge but one. His position becoming very uncomfortable at this time, the lieutenant advised Briggs to fall back, but

he wanted one more shot, and in exposing himself to secure it, he was himself shot and instantly killed. Woodring sallied forth, early on the ninth, to find his comrade operator. After some search and inquiry, he learned that he had been killed, and hurrying to a back porch near the office, he saw the body of poor Briggs, cold in death. A bullet had entered an eye and passed through the head. While the Union people of the North were proudly discussing the victory, a few days later, at Delavan, Wis., Henry G. Briggs' young wife and two children were bewailing the death of this gallant volunteer, whose remains lie buried in the soldiers' cemetery in the town he assisted so bravely in defending.

The Federals lost fourteen killed and one hundred and forty-five wounded; their antagonist's loss exceeded two hundred.

A new attack was expected the next day, and preparations were made by Colonel George H. Hall for a final defense in the main fort on the opposite side of the town from where the fighting on the eighth chiefly occurred. Woodring burned his old messages, hid his instruments, except relay and key, which, with recent telegrams and cipher key, he took to the fort, where, from complete exhaustion, he lay and slept till near dark, when, Colonel Hall desiring to telegraph for reinforcements, Woodring volunteered to transmit them from the nearest point where he could get an electric current from St. Louis batteries, provided an escort was furnished. Accordingly, as directed, he reported at dark with repairer Bates, received the despatches, and with twenty-one men of the Seventh Missouri cavalry proceeded slowly, owing to the wires across the road. Twenty-four miles out the men began to object to proceeding farther, and soon decided to return to their command, the sergeant commanding them exercising little control. The operator called for volunteers and only one man besides Bates responded; but with these two men Woodring pressed forward, determined on his mission. Ten miles beyond, they discovered a small party of mounted men, armed, and dressed partly in blue, the rest in jeans, looking not unlike Marmaduke's men. They, it seems, were suspicious of the three and cried, "Halt! advance one;" but the trio, considering their inferior numbers, deemed the demand unfair, and successfully insisted that one of the others advance.

LIBRARY OF THE UNIVERSITY OF CALIFORNIA

As he approached, the three separated, two being on the side and one in the center, prepared to dash through the others if they were rebels; but they were the advance guard of a large militia command *en route* for Springfield, but in fact diverged on Hartsville. That night (tenth), after a grand reception at Lebanon, where the operator and others were duly lionized, Woodring himself telegraphed the messages to St. Louis, not having been able to get circuit therefrom west of Lebanon. The North had understood that Springfield was captured. The cowardly sergeant was reduced to the ranks.

Marmaduke, moving easterly, encountered Colonel Merrill's Twenty-first Iowa at Woods Fork, which place he flanked after a short renconter, and reaching Hartsville again found Merrill in his front, with reinforcements, and after a short and sharp conflict, resulting in a Union loss of seventy-eight killed and wounded, Merrill retired to Lebanon for ammunition, and Marmaduke hurried into Arkansas, where he was attacked at Batesville by the Fourth Missouri cavalry and driven across the river.

Owing to bitter complaints to the effect that Hindman was incompetent and tyrannical, General Price took command in the department and sent Marmaduke with a larger force than before into South-eastern Missouri, to Frederickton, from which point he moved against Cape Girardeau, where he fought McNeil's force, April 25, but withdrew and retreated to Arkansas on discovering the approach of gunboats and reinforcements for McNeil.

J. D. McCleverty, operator at Frederickton at this time, was captured and handcuffed. Dr. Boyd, who was acting as Confederate surgeon, was quite a fair operator, excelling McCleverty, who, in the vernacular of the key, was but a plug. Boyd thought to deceive the Yankees as to Marmaduke's objective, and possessing himself of the Frederickton office, he called St. Louis and asked for R. C. Clowry, who responded; whereupon, Boyd, feigning to represent McCleverty, said: "I have just escaped from Frederickton. Marmaduke has taken the place and I have learned just enough to know that he will move from Frederickton on Rolla. I am in the woods and have tapped the line to report these facts. Mc." But Clowry knew at once that

it was not Mc at the key, and told Boyd that his trick would not work, and calling up Pilot Knob instructed the operator to cut Frederickton out. Boyd subsequently acknowledged himself beaten, adding that he then declared he would never attempt another Yankee trick.

The affairs at Fayetteville, Arkansas, April 10, between Colonel M. L. Harrison's Federal force and General Cabell's two thousand cavalry; May 20, between Colonel Phillips' eight hundred at Fort Blunt and Colonel Coffey's three thousand troopers; and July 1, in the Indian Territory, between Colonel Williams' thirteen hundred Unionists and seven hundred Texans and some cowardly Indians under chief Standwatie, and between Blunt's command of three thousand and Cooper's six thousand, July 17, a little south of Fort Blunt, in all of which the Union troops were victorious, comprehend substantially the further fighting, which may be denominated battles, within this department during the year 1863. But guerrilla raids continued to be the order of the day, though not so frequent and mischievous as before, if we except the wanton and merciless conduct of that arch fiend, Quantrell, who, with three hundred bushwhackers, fell upon the defenseless and unsuspecting city of Lawrence, Kansas, at daylight, August 21, and ravaged it with fire and sword.

Another outlaw, Hildebrand, made frequent raids with his gang of marauders. On the night of July 10, he appeared at Irondale, eight miles south of Mineral Point. About seven months previous, Miss Louisa E. Volker, a most estimable young lady, had relieved C. T. Barrett, operator at Mineral Point, and became at once not only the first lady operator in the corps, west of the Mississippi, but the only operatrix who had ever telegraphed on that side of the river. Entering upon duties which, heretofore, had devolved exclusively upon young men, she realized that peculiar feeling of responsibility which arises from an important but experimental trust, and hence, with all the zeal of a leader, she undertook the fulfillment of this new *rôle* of feminine usefulness in war, in which she was stoutly supported by such men as Noel, Fletcher, McMurtry, French, Macklind, Greyson, Winfield and Walker, brave and loyal Unionists of that locality. Miss Volker was called at midnight,

July 10, to telegraph to the commander at Pilot Knob to intercept Hildebrand, but after robbing a store, he and his men hurried east of the river and scattered in Illinois.

On a former occasion, the station six miles north of the Point was attacked by cavalry, surprising Captain Lippencott's company, which being driven off, collected at Mineral Point. Miss Volker had previously ascertained the presence of the enemy and telegraphed to Pilot Knob the situation, and started the repairer north to mend the line if possible, which was actually accomplished during the night, she sitting by the instrument all night in expectation of an attack on Mineral Point.

In October, the line was extended from Sedalia to Warrensburg, where were General Brown's head-quarters, and in December, Dwight Byington was relieved at Little Rock by Robert C. Clowry and ordered to Leavenworth, to take charge of the military line being rebuilt between Fort Scott on the Missouri-Kansas border, and Kansas City.

The several combats noted in this chapter, especially "Prairie Grove," where, thanks to the military telegraph, Herron saved Blunt's army, practically destroyed the rebellion north of VanBuren, Ark., by the summer of 1863, and when Steele drove Price from Little Rock to Arkadelphia, that vast territory north of the Arkansas River was cut off from the Confederacy, and telegraphic communication with St. Louis thus became a possible *desideratum*. Thus it occurred, that Charles A. Paxson, chief operator in South-west Missouri in September, and Robert C. Clowry at Little Rock in December, began extending the lines to Fort Smith, on the Arkansas River, where it crosses the western border of Arkansas. On the 14th of September, Paxson's builders were driven back to Cassville, but McNeil furnished protection, and late in September, it was rebuilt and extended to Fayetteville, where H. H. Taylor operated at M. La Rue Harrison's head-quarters; and in October, to Fort Smith, four hundred and three miles from St. Louis.

In the fall of 1863, Major Smith appointed Charles A. Hammann assistant manager of telegraphs within his department, and as shown, Clowry was sent to Little Rock.

Robert C. Clowry, was, on the 27th of October, appointed captain and assistant quarter-master, and assigned to duty by

Colonel Stager, as assistant superintendent of Federal military telegraphs within the Department of Arkansas, with head-quarters at Little Rock. We have seen something of Clowry's labors in the military service, and now that he has become a commissioned officer therein, a word concerning his antecedents. It will be observed that none of the officers, while boys learning telegraphy were especially favored with means, and it is a remarkable fact that the great majority of telegraph operators now or heretofore manipulating the key in this country, were children of poor parents, or of those whose circumstances were somewhat straightened; very many were messenger boys, among whom, besides the subject of this sketch, may be named, Andrew Carnegie, Robert Pitcairn, David McCargo, T. B. A. David, Charles J. Merriwether, George H. Grace, and George K. Leete, the first three of whom became superintendents of railroads, the second three of telegraphs and the last an adjutant general, on General Grant's staff. Mr. Carnegie, after endearing himself to the people of his native place, in Scotland, by his munificent benefactions, has, with rare generosity offered to contribute two hundred and fifty thousand dollars to the City of Pittsburgh for library purposes. It was in that city that young Carnegie was a telegraph messenger. Thomas A. Edison, a prodigy among inventors of electrical apparatus, if not in other scientific branches, was a newsboy before he became a telegrapher.

ROBERT C. CLOWRY.

At an early age, young Clowry became a pupil of D. C. Jeneson, manager of the Joliet, Ill., telegraph office, whom he was to serve six months as messenger, in consideration of being taught to telegraph. The duties of a telegraph messenger exact

the utmost promptness, which is one of the best lessons a youth can acquire, and it is not unlikely that Robert's services under Jeneson, conduced as much as any other one thing to make him the reliable officer he subsequently became. Clowry's first office was at Lockport, Ill., which he took in the fall of 1852, at the expiration of his service with Jeneson, and having there acquired greater proficiency in the art, and experience in the business, he was made manager of the Springfield, Ill., office, December 13, 1853. By the spring of 1859, he had so approved himself among telegraph men as to justify his appointment, then made, to the office of superintendent of the St. Louis and Missouri River and Kansas Telegraph Companies, generally called the Stebbins lines, and in the fall of that year, as his head-quarters were in St. Louis he was also made chief operator of the consolidated office there, and so continued until the middle of April following, when he was chosen superintendent and secretary of the Missouri and Western Telegraph Company, with head-quarters for a time as before, and then at Omaha, Neb., where he remained until induced by George H. Smith, formerly manager of the St. Louis consolidated office, to enter the Military Telegraph Corps. At this writing, his progress has indeed been flattering, nor can it be doubted that it rejoices all who know him. It is not always that merit has its reward, but when it is recompensed, all just men are pleased.

Captain Clowry took down the Benton wire and also about twenty miles of line leading to Des Arc, with which, and new wire, he proceeded late in December, to build toward Fort Smith to meet Captain Smith's party, which started earlier therefrom and built to Dardanelles, half way (eighty-five miles), but for want of insulators, which were long delayed, the line was not completed until February 13, 1864, at which time the telegraph, five hundred and seventy-three miles long, was in admirable working condition from St. Louis to Little Rock. Offices at Clarksville, Dardanelles and Lewisburg were opened on the Fort Smith line. Ewing L. Armstrong relieved Woodring at Springfield, and the latter went to Fort Smith, where he was aided by Joseph E. Sears. Joseph Hansen worked the VanBuren office; at Dardanelles were J. L. Sponagle and James W. Chandler; at Lewis-

burg, Thomas M. Peeler and Seeley B. Knapp, and at Clarksville, James A. Shrigley operated.

But few incidents remaining unnoticed occurred in Arkansas and Missouri during the period covered by this chapter. Keyes Danforth, a repairer, was captured between Frederickton and Cape Girardeau, Mo. Henry Wilson and C. B. Applegate, repairers, near Memphis, and T. R. Berryhill, operator, was captured at Arkansas Post. October 25, 1863, Marmaduke attacked Colonel Clayton, at Pine Bluff, and was repulsed.

December 30, David O. Dodd, a Confederate operator, was arrested in Little Rock, tried by court-martial, and executed as a spy. The following is the history of that sad affair. Dodd was a young man, of about eighteen years, who had never held any position of consequence as an operator, and was not in any employ when taken, but had been on Superintendent Baker's lines a short time before the coming of General Steele to Little Rock. After Steele's appearance there, Dodd and his father continued to reside in the city, but they concluded to move to Mississippi, and got as far as Camden, Ark., when the father bethought him of some business at Little Rock, which had been overlooked. David was sent back to attend to it. It was stated and generally believed that young Dodd, in order to obtain a pass through the Confederate lines, agreed to bring, on his return, information concerning Steele's Little Rock fortifications. David, after remaining several days in Little Rock, passed the first Federal picket line unmolested, but the outer pickets searched his person and baggage, and were about to let him pass, when certain curious pencil marks in his memorandum book caused a suspicion that they might be translated. He was sent to head-quarters, where, upon examination, the mysterious dots and dashes were shown to be telegraphic characters, disclosing a complete and comprehensive description of the Federal fortifications about the city. It is said that the information therein contained could not possibly have been obtained by Dodd alone.

A court-martial was convened. Captain Clowry testified to the meaning of the characters, and Dodd admitted that the facts so written were furnished by a party or parties, who knew all about the works. He was sentenced to death. His father's relatives and friends exerted all their influence with General Steele,

to induce him either to grant a pardon, or commute the sentence to imprisonment. Steele finally consented to consider their petitions favorably, provided Dodd revealed the name of the party from whom he derived the important information and all the facts pertaining thereto, but Dodd was firm and unyielding, saying that he preferred to die rather than betray a friend. A last agonizing appeal was made to him on the scaffold, to accept the conditions imposed by General Steele, and live, but he waived off his broken-hearted relatives, and bade the executioner do his duty, as nothing would break the seal placed upon his lips. He was buried in Mount Holly cemetery, in Little Rock. A small, plain marble shaft, erected by his friends, marks his grave—a tribute to the bravery of a beardless boy, who truly died that others might live. The monument bears the simple inscription: "Here lie the remains of David O. Dodd, born in Lavacca County, Texas, November 10, 1846; died January 8, 1864."

CHAPTER XIV.

THE TELEGRAPH IN VIRGINIA DURING THE FREDERICKSBURG AND CHANCELLORSVILLE CAMPAIGNS.—SUFFOLK.—VARIOUS RAIDS.

When Burnside assumed command (November 8, 1862), his army of about one hundred and twenty-seven thousand men was, so to speak, in bivouac. Under McClellan it would have gone to Culpeper C. H., but Burnside directed its march, which began November 15, to Falmouth, with Fredericksburg as an objective. Lee, who left the Antietam with less than forty thousand troops, passed Winchester with about seventy-five thousand, and at Fredericksburg had about eighty-five thousand able bodied, of all arms.

The telegraph had become an established necessity. It had ceased to be a *desideratum*, for it had grown to be an *essential*. Burnside's telegraphic facilities were less exposed than Pope's had been, as he had fewer outposts that it was important to defend. Most of those he did have, however, were in telegraphic communication with the commander and the capital. On the Orange & Alexandria Railroad, an outpost office was kept open at Union Mills. Centreville, a little above, was also open. The wire to Fredericksburg, *via* Alexandria and Acquia Creek, was a short line, and easily guarded. These were the only ones in the department, which needed special protecting care. The offices in the department, in December, were, in the District of Columbia, the War Department, General McCallum's, Arsenal, Navy Yard, General Casey's, Head-quarters of Defenses of Washington, Tennallytown, Arlington and Long Bridge; in Virginia, Alexandria, Fairfax C. H., Centreville, Burkes, Stafford C. H., Fairfax Station, Union Mills, Dumfries, Acquia Creek, Brook Station, Potomac Creek, Stoneman's Siding, Falmouth, Generals Burnside's and Sumner's head-quarters, Yorktown, Williamsburg, Fort Monroe, Norfolk, Suffolk, Cherry-

stone, Drummondstown, Eastville and Harpers Ferry; besides which, there were, in Delaware and Maryland, a number more, making in all forty-eight offices, worked by eighty-eight operators.

Before starting his army for Falmouth, Burnside arranged, or believed he had done so, with Halleck, with sufficient definiteness to leave no mistaking, for the arrival of pontoons at a point opposite Fredericksburg, when the army should appear, but they were long delayed, and Lee was thereby enabled to encamp about Fredericksburg and strengthen his position. His army behind, above and below Fredericksburg, occupied a line about six miles long.

It was while Burnside was preparing to cross and give battle and Lee was busy on Marye's and Willis' hills and other naturally strong positions, that several cavalry incursions were made, two of which interrupted telegraphic communication, the first at Poolesville, Maryland, and the other at Dumfries. J. L. Cherry was the operator at Poolesville when (November 25) Major White's battalion of Independent troops — probably a polite name for guerrillas, the Unionists residing thereabouts called them bushwhackers, but General Lee mentions them as a part of General Jones' command—suddenly entered the town, which lies across the Potomac, say five miles from Balls Bluff. They numbered about sixty. Five hundred stand of arms and forty thousand rounds of ammunition had been stored in Poolesville for some time, and as these constituted a tempting bait for the Confederates, it was but natural to expect a raid. Indeed, Poolesville had been in a state of exacting unrest for many weeks, of which fact the following telegram, found in the Report of the Committee on the Conduct of the War, is but partial proof:

HEAD-QUARTERS ARMY OF THE POTOMAC,
Bloomfield, 9 P. M.

To GENERAL H. W. HALLECK, General-in-Chief:

I have the honor to transmit for your information the accompanying despatch, which has been received from Poolesville.

(Signed) G. B. McCLELLAN,
Major General.

Poolesville, November 3, 1862.

To Seth S. Williams, A. A. G.:

Last evening and this morning, I learned the following information from different reliable persons. They report a force of Stuart's cavalry concealed in a large woods about five miles from here, between Frederick and Rockville road, watching an opportunity to escape. One of the men says he saw a farmer in that vicinity taking provisions for them at midnight, and he also saw three or four of the rebels take provisions from the farmer. Their numbers can not be ascertained, but it is not very small from what I can hear. They are some of Stuart's left behind, or that got cut off when he made the last raid over here.

P. S.—No troops here. J. L. Cherry, *Operator.*

Rumors were rife of the coming of the enemy some days before Major White appeared, and Cherry, to save the arms and ammunition, telegraphed to the Secretary of War the fact that they were in Poolesville. At this time eighteen soldiers—members of a Pennsylvania regiment of infantry—were stationed there. Cherry also telegraphed to Colonel Stager the situation, and asking instructions, was directed to remain at his post until he saw the enemy coming. The office was in the second story of the Town Hall, and the soldiers were quartered on the first floor. A guard was stationed at the office at night only. Twenty-five Federal cavalry, and wagons which they escorted, left Poolesville with the five hundred small arms and the ammunition, for Washington, on the evening of the twenty-fourth. At five o'clock, A. M., the next day, and but a few minutes after the office guard had gone down, Cherry was awakened by the rattling of sabers and heavy tramp of men. His office was filling with Major White's men, who had already secured the guard below.

As soon as Cherry dressed, he found opportunity to loosen the adjustment cord or spring used to draw the armature from the relay magnet when the key or circuit is open. This took but a second and prevented the instrument from ticking. Cherry then began calling, "DI"—War Department—intending to attract the attention of the operator there and to briefly relate what had occurred, but just as he began, Lieutenant Dorsey, second

in command, stepped up and peremptorily ordered the operator to leave "that thing" alone. Cherry left it alone and was marched to the center of the town with the captive soldiers. Major White, who once lived in that neighborhood, left the main body of his command to Dorsey, while he attended to some matters outside. Dorsey told Cherry he would parole all but himself. The thought of Libby prison under such circumstances is a natural precursor to thoughts of escape, and although Dorsey was talkative and pleasant, even promising Cherry a good horse to ride, the lad was determined on escape. Plans, like wants, grow on one; immature ideas, like unknown by-paths, lead, ofttimes, to happy ends; and sometimes results only, justify the means employed. Cherry's scheme grew on him, for his first idea found expression as follows: "Dorsey, have a drink?" From that moment Dorsey's heart began to open toward the young man, and the two were soon seated in the rear room of a store, talking over the subject of paroles as they imbibed a liquor called "Hail, fellow, well met;" but Dorsey, notwithstanding, insisted on taking the operator to General Longstreet. It was then that Cherry thought to get the rebels all drunk. That was a big undertaking, but undaunted, he stepped to the front and extended a general invitation. Every trooper had dust, cobwebs or mildew in his throat, which he wished to wash down, and as they came up to face that enemy which has made more graves than wars have, Cherry arranged with the keeper to give them as much as they would drink, after which he retired to the little room in the rear, where sat the lieutenant. Dorsey, however, soon went into another store and began writing paroles. Cherry joined him and assisted, hoping to prevail on the officer to include him. By and by Dorsey stepped out, leaving the operator hard at his self-imposed task, and before it was completed he was informed that every rebel had left the town. It was soon revealed that Major White returned and found his soldiers nearly all drunk, and to save them from capture by any handful of men that might come along, he hurried off and recrossed the Potomac.

Cherry was soon after ordered to open a testing office at Occoquan, Virginia, a place fifteen miles south of Alexandria, but in three days food and forage became scarce and he was ordered

to try Dumfries, ten miles below. This place he reached at two P. M., and though the people seemed to have enough to eat, they had a cadaverous look, and appeared in eyeing the Yankee operator to make perpendicular wrinkles between their half-closed eyes, a kind of scowl that foreboded no good; so Cherry went on to near Stafford Court House, and connecting his instrument, wired Colonel Stager that Dumfries was an unsafe place to remain in and he did not wish to be captured twice in two weeks if it could be avoided. It so happened that Frank Lamb, who had been operating in Centreville, thereupon started to open Dumfries office, escorted by twenty-five cavalrymen, but, by a strange coincidence, General Wade Hampton, with about nine hundred rebel cavalry, was *en route* to close it and tear down the wire. Lamb and escort reached Dumfries about nine P. M., December 11, and about five A. M., the next day, Hampton made them all prisoners.

The days lost awaiting the arrival of pontoons made Burnside's advance across the Rappahannock extremely hazardous, for the enemy was in readiness, when on the 11th of December, the pontoons opposite and below the city were laid. By noon of the thirteenth, the battle had fairly begun and Marye's Hill had become the scene of dreadful carnage. Burnside had given his orders, and from Stafford Heights, opposite Fredericksburg, was watching the battle two miles away. What reports he received came by courier, as there was no telegraph across the river. Weighed down by anxiety and responsibility, one can imagine how pleased he would have been to be in constant communication with Sumner, Hooker and Franklin, commanders of the respective grand divisions of the army. Telegraphy for tactical purposes, although eminently successful on the Peninsula, had not yet become a matter of course, owing in a large measure, doubtless, to the presence of signal officers, of whom too much was expected; so Burnside was mainly dependent on his field glass and reports by messengers. The Union army crimsoned itself with honor, but from assault after assault, so much of it as was not stricken to the ground, retired to prepare for another. In storming the Confederate strongholds, the Union loss was one thousand, one hundred and fifty-two killed, and nine thousand,

one hundred and one wounded, and over three thousand missing or thirteen thousand, seven hundred and seventy-one in all; nearly three times that of those who so stoutly defended the works. Two nights later the army recrossed safely and went into camp.

During a bombardment of Fredericksburg, preceding the battle, Frank Drummond, who had recently been exchanged and was, with J. G. Garland, operating at Falmouth Siding, went down to the heights, on which were over one hundred and forty cannon that had begun the destruction of the city opposite. Only slight response was made to their fire for the most part, but the first shell that the enemy sent, fell so near Drummond as to remind him of some business he had forgotten. It was not twilight yet, and as shell after shell passed him and he as regularly fell to the ground, an observer would have imagined he was carrying too much of a load in his hat, did not the screaming fiends in the air offer a more charitable excuse. Anyhow, men will laugh "to see such sport," even if it isn't nice in them to do so, and Drummond to this day, thinks the whole army was looking at him. When Drummond reached his office, he heard that Garland had gone back a mile to Burnside's head-quarters, probably on business also, as the Siding was not a healthy place to remain in.

The day (sixteenth) the Union army went into camp, General Hampton again crossed the river and raided to Occoquan and Dumfries, cutting the telegraph badly, and thereby greatly annoying General Burnside, who, at 2:45 P. M., December 20, telegraphed General Stahl:

> You will please see that a strong guard is thrown out at once, to protect the telegraph lines. A sufficient force must be detailed to insure its safety, even to the whole of your command if necessary.

Hardly had Hampton recrossed, when General Stuart with detachments of Hampton's and F. H. and W. F. Lee's brigades, started to pay Dumfries another visit. Truly Dumfries *was* an unsafe place for Federal operators and Cherry began to think there was a Providence in the menacing looks that bade him "move on." Operator O. H. Dorrance started from Alexandria for Occoquan, while Stuart was *en route* for Dumfries. A tele-

gram from Major Eckert to Colonel Stager, dated December 29, states the case as follows:

> Rebels cut line between Dumfries and Stafford before making attack on Dumfries. At five P. M., cut line again between Dumfries and Occoquan. Dorrance reached a point near Occoquan early Sunday morning, and got in circuit; couldn't remain long, owing to desperate charges by Seventeenth Pennsylvania cavalry, with sabers drawn, going at full speed *to the rear*, of which he gave us some laughable instances. At five P. M., Sunday, Flagg reported the enemy within three miles of Burkes.

Having swept everything in their way from Dumfries to Occoquan, a portion of Stuart's force struck the Orange & Alexandria Railroad near Accotink bridge, and destroyed it. This bridge was a little east of Burkes, but before it was burned, J. A. Flagg, operator at that station, while reading by an open window, that balmy Sunday afternoon, saw a woman running as rapidly as possible toward the office. Flagg rushed to meet the kind woman, who, while gasping for breath, stated that the rebels were in large force at Wolf Run Shoals, a few miles south of Burkes. This information was immediately telegraphed to the War Department, and word was also sent to the conductors of two trains which had proceeded beyond Burkes, probably after wood. These were enabled to cross the Accotink bridge before the enemy struck it, and reached Alexandria in safety. Flagg, after taking his personal effects to his boarding house, was returning, when he met a Mr. Ross, who had charge of a government train of twenty wagons, and eighty-two horses, in the woods. His negro teamsters, greatly frightened by the news which had reached them, were fleeing toward a thicket where they hoped to hide, but Flagg hailed them and placing his hand in his breast pocket as if to draw a revolver he did not have, told the darkies he would shoot the first one that advanced and that they must at once hitch up and drive to Fairfax Court House. This they did quickly and saved the train.

Flagg intended hiding in the heavy pine woods near by, but before he could get ready to go, the enemy rushed in, and two boys, not over seventeen, were placed as a guard over him. These, as might be expected of over zealous warrior youths,

first invested with authority, used their revolvers with threatening recklessness until a Mr. Shepard, operator with General Stuart, entered and ordered the youngsters down stairs. He then placed Flagg under another guard instructed to shoot him if he touched the instrument. In company with one hundred and twenty other prisoners, he marched many weary and hungry hours, reaching Culpeper Court House at nine P. M., December 31, stiff, sore, exhausted and faint. One of the Lees, who promised one Marshall, with whom Flagg had boarded at Burkes, to parole the latter the next day, neglected his agreement, and January 2, the operator was in Libby prison. The next morning, a Richmond paper described the beautiful combination telegraph instrument captured at Burkes. At the close of the month, Flagg and eighteen hundred other prisoners were exchanged.

Operators H. C. Buell, at Union Mills, W. N. Embree, at Fairfax Station, and R. F. Weitbrecht, at Fairfax Court House, were near enough to Stuart's line of march to feel a justifiable uneasiness, but Stuart rode toward Falls Church, and swung around Fairfax Court House toward Chantilly; some of his troopers came within a mile of Centreville, where was operator A. H. Bliss, who, the wire being down, put out his lights and climbed a great tree, for the double purpose of observing and hiding. Bliss had no confidence in the staying qualities of the Federal regiment about the fort a mile off, and hence took to the tree.

December 30, Burnside, who had initiated another offensive movement, received a cipher telegram from Mr. Lincoln, saying substantially, "I have good reason for saying that you must not make a general movement without letting me know it." Disaffection in the army in high quarters had reached the ears of the President, and caused him to fear that Burnside would not receive that hearty support so essential to success. In a measure, that feeling was modified by personal interviews, and Burnside began executing another movement, intending to cross above Falmouth at Banks' and United States fords. A telegraph line was built to Banks' Ford, and J. H. Emerick opened an office there January 20. His tent was the clouds that rained incessantly, and his desk was a caisson that had been abandoned in the mud. The storms prevented action and the army again

went to camp. Generals Burnside, Sumner and Franklin were soon after relieved and General Joseph E. Hooker appointed to the command of the army.

Thus in the East, Federal affairs were unsatisfactory in the beginning of the new year. The last blow was extremely discouraging to the Union people. The joy in the South was great; both sides were yet painfully concerned, but the North more than ever determined. These two powerful and brave armies were unbroken and in the coming clash of arms, an accident, the elements, a mere mischance, might turn the scale for or against, and so the people north and south

> Like souls that balance joy and pain
> With tears and smiles from heaven

anxiously waited and prayed.

January 25, 1863, General Hooker assumed command of the Army of the Potomac, which was reformed into corps commanded respectively as follows: first, General Reynolds; second, General Couch; third, General Sickles; fifth, General Meade; sixth, General Sedgwick; eleventh, General Howard, and the twelfth by General Slocum. While these officers were preparing their respective commands for a new campaign, the Federal and Confederate riders were abroad, and when the latter were not, rumors of their near presence were rife.

About ten o'clock one stormy, cold night in February, it was reported at Fairfax Station, where Colonel Percy Wyndham's cavalry and other troops were located, that General Stuart was coming. A little south of the station, lay Wolf Run Shoals, where Colonel Blunt's command was posted. A telegraph line had been recently constructed from Union Mills to the Shoals, and as soon as the report of Stuart's approach was received, Wyndham asked Major Eckert to send an operator to open the Shoals office. Accordingly, Richard Power, Jr., who chanced to be at Fairfax assisting Embree, who was convalescing, was ordered to proceed at once with a cavalryman, who pretended to know the route. They soon lost their way in the blinding snow-storm, which changed to a drizzling rain, and in the dark, groping about the woods, listening for sounds of guerrillas, cold,

thoroughly wet, their outer clothes stiff with ice, they struggled on until daylight, when, finding a path which led them to an elevation, they looked down and beheld Blunt's camp, which, without challenge and unobserved, they entered. James Glazier, operator at Union Mills, who had long struggled against drowsiness, connected the wires, when it was ascertained that Stuart had not been near.

On the 8th of March, John S. Mosby, a daring Confederate cavalryman, then known only as a guerrilla, performed a most splendid feat, for which Stuart soon after publicly thanked him. He, with but a handful of men, at two o'clock in the morning, without warning, entered the Union camp at Fairfax Court House, where were then located operators R. Power, Jr., and Robert Weitbrecht. The latter was on duty, and, probably guided by his lights, Mosby, accompanied to the tent by five or six followers, walked up to Weitbrecht and presenting a revolver, demanded that the operator and his orderly make haste and direct him to the head-quarters of General Stoughton, quietly and without daring to speak above a whisper. Of course the prisoners did as directed; there was no alternative. On the way the rest of Mosby's men joined him. They had been stealthily selecting the best horses. Stoughton was found in bed, as were also some of his staff officers. As Mosby's men were moving off with captives and captures, a Colonel Johnston, who was awakened by the unavoidable noise, went out on the front porch of the house he slept in, and called out, "Halt! The horses need rest. I will not allow them to be taken out. What the devil is the matter?" etc. Receiving no reply, he again spoke out, "*I am commander of this post and this must be stopped.*" This was just what Mosby wanted to know. Johnston's retreat was speedily cut off. It is said, however, that owing to the darkness he fled to a neighboring barn *en deshabille*, and crawling under, eluded the pursuers, who took to the rebel lines about twenty prisoners and seventy horses.

A few weeks later, Weitbrecht was exchanged as a Federal captain, he having reported himself such at Libby, to facilitate his return. His appearance was sad, laughable and mussed. The rebels had exchanged his clothes also. It was supposed at the time at Centreville that Mosby entered the Union lines be-

tween that place and Chantilly, passed just outside the Centreville pickets, struck the Warrenton road nearly two miles therefrom; moved thence by pike to within a mile of Fairfax Court House, and that he returned by the same route. Only four days before Mosby's venture, A. H. Bliss, the Centreville operator, warned General Heintzelman that the cavalry pickets of Colonel Wyndham were, about the 15th of February, withdrawn from the front and right of the Centreville command, and that since then but few patrols had been over the Chantilly road, leaving about three miles unguarded. This was referred to Colonel R. Butler Pierce, commanding the cavalry south of Potomac, within the Department of Washington, but seems not to have been remedied. Bliss was cavalierly informed by the Colonel that in future like reports should be made to him, but Secretary Stanton having heard of the matter, caused the following to be telegraphed to Bliss:

WAR DEPARTMENT.

To A. H. BLISS:

The Secretary of War directs me to thank you for your efforts, and in future authorizes you to report direct to him.

THOS. T. ECKERT,
Major and A. D. C.

Since Mosby's operations about Fairfax Court House, have just been considered, it may be well for the present to avoid strict chronological order and call attention to the interesting fact that operator W. N. Embree, while working there, became acquainted with a number of very pretty young ladies; that notwithstanding one in particular was bitterly "Secesh," a mutual regard sprang up, destined to have a romantic end. It was shortly after the battle of Chancellorsville, an account of which will soon appear, that Embree in his best, set out for the country to renew his acquaintance with the aforesaid bonnie lassie, and it was while he was basking in her smiles, that three of Mosby's men entered her home and took the bonnie laddie under their special charge. In due time, after a tempestuous land voyage, Embree was in Libby prison, and later, on Belle Isle. Federal cavalry was sent in search of him as soon as he was missed, but they found only a linen coat, which was believed to be his; wherefore the young man was supposed to have been waylaid

and killed. His father, who was in the employ of one of the departments at Alexandria, made unavailing efforts to obtain tidings of his son. Three and a third months later, Embree was exchanged. From one hundred and fifty-four pounds he was reduced to ninety-four. In the streets of Alexandria, he met his father and passed him twice without being recognized, then he spoke, and that glad father rejoiced that he "that was dead is alive again."

In April, Suffolk, Va., was threatened by twenty-eight thousand men under Longstreet, who hoped to recover the whole country south of the James River, extending to Albemarle Sound, N. C., including Norfolk and Portsmouth. General Peck commanded fourteen thousand troops at Suffolk. From April 11, to May 2, that city was besieged. Railroad trains bringing troops and supplies were very numerous, giving operators but little rest. At one period, C. A. Homan, operator at the Suffolk station, without relief, ran trains by telegraph for four days and three nights. Wilbur F. Holloway was operator at Peck's headquarters, the O'Brien brothers, at Norfolk, C. K. Hambright, at Newport News, and J. R. Gilmore and George D. Sheldon, at Fort Monroe. Longstreet attempted to carry the defenses by assault, but the telegraph brought gunboats to Peck's aid and the enemy was repulsed with considerable loss, when Longstreet's force proper, rejoined Lee's army.

About two weeks before making a general advance, General Hooker, solicitous about his telegraphic communications with Washington, telegraphed Halleck at the capital, advising that a regiment of cavalry be sent from Washington to patrol and guard the line *via* Occoquan and Dumfries. General Halleck replied that it was Hooker's duty to attend to that, and ordered him to do so, whereupon, the latter, by telegraph to the Secretary of War, requested him to lay both messages before the President, and in three hours Halleck telegraphed Hooker that a regiment had been sent.

General Hooker succeeded admirably in preparing his army for another conflict. It numbered fully one hundred and twenty thousand available troops; twice that which his adversary had in

hand. After despatching General Stoneman with his grand cavalry force to operate against Lee's communications, Hooker began his movement (April 27), aiming to cross the river about three miles below Fredericksburg, with Sedgwick's and Reynold's corps, which were to demonstrate as if they led the main attack, while the Twelfth, Eleventh, Fifth and a portion of the Second (the rest under General Gibbons being left about Falmouth) crossed above at Kelly's and United States fords, to be followed immediately by the First if it could be spared from below, where it was ordered in reserve for either the Third or Sixth.

The Signal Corps put up a line from Banks' to United States Ford, about ten miles, expecting to work it with Beardslee's magneto instruments, but soon after the army movement began, General Hooker became dissatisfied with its slow work, and ordered General Couch, who was at the United States Ford with a part of his corps, to "establish rapid communications with the telegraph at Banks' Ford, and with Meade and Slocum, as the telegraph from Banks' to United States Ford works so slow." Meade and Slocum were moving on Chancellorsville from Kelly's Ford. The United States military telegraphers at once took possession of the Signal Corps line and worked it with Morse instruments. But the signal officers built and operated the only telegraph connecting the United States Ford with the army about Chancellorsville, and as a consequence, business being very great, most of the messages were sent to General Hooker by orderlies. Caldwell or Jacques should have been brought over from the old head-quarters office to work the wire at the front and the United States Ford office made an intermediate instead of a repeating office, but the signal folks had the field and thought they could work it.

As soon as the pontoon was laid (April 30), the wire was extended across the river, and an office opened in a house near the ford. J. H. Emerick and James Murray, operators, were located here. At Banks' Ford, about ten miles down and across the river, were two more offices, one at the ford, where W. K. De Witt was located, and another a little back on the main line, which was opened by John B. Pierce, who was relieved later by Samuel H. Edwards. A Beardslee telegraph was also operated

from this ford to head-quarters in the rear, as soon as General Sedgwick located there, after returning from his operations on the south side. General Hooker ordered an entire regiment to guard the main line along the river. The regiment was spread out from the United States Ford to Falmouth, and every soldier of it, instructed to shoot any one caught tampering with the wire. From a point near Falmouth, messages for Sedgwick and Reynolds across below, were to be carried by courier. At least all obtainable information tends to induce that belief. Why a line was not erected upon the heels of Sedgwick's advance and he (until cut off), kept in constant telegraphic communication with the Commanding General at Chancellorsville, whither the main army rapidly moved, is an enigma. General Hooker soon felt a natural embarrassment consequent upon a lack of telegraphic facilities, for which it would seem, he was responsible, for certainly had lines been ordered, Major Eckert would have had no difficulty in constructing them. Perhaps too much reliance was placed on the signal service, concerning which, its chief subsequently reported, "In the movements at Chancellorsville, crippled as the corps was by the failure (through no fault of its members) of some of the apparatus, they rendered such service as that may be, which kept up the communication with General Sedgwick's Sixth Army Corps at that time utterly cut off from the main body of the army and from head-quarters, over the heads of the rebel forces."

This is the only evidence within reach that any signal officers attended Sedgwick, whose operations deceived Lee, and consequently Hooker easily reached Chancellorsville. But from that time, he appears to have invited attack, instead of continuing a vigorous offensive. May 1, severe but not general fighting occurred, resulting in considerable loss to both sides, and as the enemy seemed really disposed to fight, General Hooker had recourse to the telegraph. He had previously directed his chief of staff to remain at Falmouth, "as from that point," said Hooker, "it being central and the wires meeting there, it was necessary to have some one, in whose capacity and judgment I had confidence." To him he telegraphed as follows: "Direct * * Reynolds' corps to march at once with pack train, to report at head-quarters." At about six o'clock, P. M., of the second,

Stonewall Jackson surprised and utterly routed the Eleventh Corps, posted on the right flank of the Union army, and drove it upon the forces about Chancellorsville, with great loss in men and arms. It did worse, for its discouraging influence was not warranted by the remaining relative strength of the contending forces. The assault was checked, and soon after General Jackson reconnoitered with a view of making another, but returning with his staff, they were mistaken for Federal cavalry, and the General so wounded that he died a few days later.

The telegraph building at the United States Ford was largely devoted to hospital purposes. Even the yard and out-buildings were filled with the wounded. The office itself was also invaded, and the operators, when possible, eased the sufferers. At night the ground wire was broken, and Emerick, in feeling around in the dark for the trouble, found the dead body of a poor soldier lying upon it.

In consequence of Jackson's assault, and a conviction that Sedgwick's twenty-two thousand troops were opposed by only about eight thousand, General Hooker, thinking Sedgwick had recrossed, at nine, P. M., of the second, caused him to be telegraphed to cross at Fredericksburg, "on receipt of this order, and at once take up your line of march on Chancellorsville road, until you connect with" the main army, and "attack and destroy any force you may fall in with on the road;" "be in the vicinity" of Hooker at daylight. "You will probably fall upon the rear of the forces commanded by General Lee, and between you and the Major General commanding, he expects to use him up."

That despatch, which Sedgwick says was dated 10:10, P. M., transmitted over twenty-five miles of wire and carried three more by courier, was received at eleven, and acknowledged at once in a telegram, in which Sedgwick said: "The enemy will be vigorously attacked wherever overtaken." At this time Sedgwick's corps was fourteen miles from Hooker's main army, and his advance so greatly retarded that he did not scale Marye's Heights, in the rear of Fredericksburg, until eleven, A. M., of the third, and, from that time till night, although the corps continued to advance, it was under constant fire, and succeeded only in making half the distance between Chancellorsville and Fredericksburg.

About Chancellorsville the third opened with a brilliant charge by the left wing of Lee's army, under Stuart, driving, after a stubborn fight, the Federal right to Fairview, while Lee engaged Anderson's and McLaw's divisions with Slocum's and Meade's troops. When the battle was developing into large proportions, and fresh Federal troops were sorely needed on the right, Hooker was leaning against a pillar of the Chancellor House. At this important moment, a cannon ball struck the pillar and utterly incapacitated the Chief for duty for some time. Indeed, it is doubtful if he entirely recovered south of the Rappahannock.

About ten, A. M., the Union troops were driven from their Chancellorsville line, and forced to form anew with fresh troops farther north. It was at this time that Lee found it necessary to look to Sedgwick, and, intent on crushing him, he spent most of the remaining day enveloping three sides of Sedgwick's force, leaving him only Banks' Ford to fall back on, and near which he was toward evening pushed by an overwhelming force. While Sedgwick was thus engaged, Hooker telegraphed the President, as follows:

HEAD-QUARTERS OF THE ARMY OF THE POTOMAC,
Near Chancellorsville, 1:25 P.M., May 3, 1863.

By orderly to United States Ford, thence by telegraph, 3:30, P.M.

To HIS EXCELLENCY, A. LINCOLN,
President of the United States:

We have had a desperate fight, yesterday and to-day, which has resulted in no success to us, having lost a position of two lines which had been selected for our defense. It is now 1:30, and there is still some firing of artillery. We may have another turn at it this P.M. I do not despair of success. If Sedgwick could have gotten up, there could have been but one result. As it is impossible for me to know the exact position of Sedgwick, as regards his ability to advance and take part in the engagement, I can not tell where it will end. We will endeavor to do our best. My troops are in good spirits. We have fought desperately to-day. No general ever commanded a more devoted army. (Signed) JOSEPH HOOKER,
Major General Comdg

That night, operator Emerick, at United States Ford, wrote in his diary:

We are defeated. Poor General Hooker and staff, holding consultation with general officers, in our office this evening. The General is extremely nervous, though this may be entirely attributable to a pillar, against which he was leaning to-day, having been shattered by a shot, giving him a terrible shock. For this, or some other reason, his mental faculties may almost be said to be temporarily impaired.

On the fourth, Sedgwick was two miles from Banks' Ford. Hooker telegraphed him to look well to the safety of his corps, and keep up communication with General Benham, at Banks' Ford, and advising him to fall back on the ford rather than Fredericksburg; and again, not to cross, unless compelled to; yet again, "Please let the Commanding General have your opinion in regard to" your holding a position on the south side, securely, until to-morrow, "by telegram from Banks' Ford, as soon as possible." Doubtless, it was in reply to this, that, within forty-five minutes, *i. e.*, 11:45, A. M., Sedgwick telegraphed from Banks' Ford:

My army is hemmed in upon the slope covered by the guns from the north side of Banks' Ford. If I had only this army to care for, I would withdraw it to-night. Do your operations require that I should jeopard by retaining it here. An immediate answer is indispensable.

General Hooker thereupon directed Sedgwick to cross. A few minutes later, Hooker received another telegram from Sedgwick, saying he could hold his position. Hooker told him to do so, and the next he received was dated five, A.M., fifth, stating that Sedgwick was across. This confusion of purposes, General Hooker explains as follows:

The messenger with the first despatch had to ride perhaps three miles to reach the place of telegraphing, and after he was sent off General Sedgwick sent another messenger immediately, with the despatch that he could hold the position, expecting that he would be able to overtake the first messenger and intercept the message that he had. But instead of that, the first messenger rode the fastest, and the message he bore reached me perhaps ten minutes before the second. Both were answered immediately on their receipt, but in some way the last was delayed in reaching General Sedgwick.

As soon as Hooker received Sedgwick's despatch announcing that the Sixth Corps was on the north bank, and the bridges swung and in process of being taken up, he determined to move his whole army back to camp opposite Fredericksburg. This was done the night of the fifth, but operators Murray and Emerick narrowly escaped capture as they crossed with the last of the rear guard. Operator Edwards, near Banks' Ford, did not fare so well. After Sedgwick had crossed or while he was crossing, a ten-pound ball passed over, but so near, his head as to produce insensibility. When he revived, he found he had bitten his tongue in the center, and had no knowledge of the cause of his hurt or the numbness which continued for two days. Banks' Ford office was closed on the eighth.

How different the result of this campaign might have been if Hooker had been in telegraphic communication with his commanders, especially Sedgwick, we leave to the speculative. The losses sustained by Sedgwick's corps were 4,601 and by the rest of the army, 12,596; of the total loss, 17,197, 5,000 were prisoners. The Confederates lost 12,227, of whom about 2,000 were captured.

The details of this fresh horror, like those of former misfortunes, were soon known throughout the land. It is devoutly to be wished that when the next war afflicts us, one nation may not suffer all the wounds, one people drink to the dregs all the miseries; but above all it is to be hoped that men will foresee the acres of dead, forehear the tremulous groans of the wounded myriads, and forecast the measureless misery incident to battle, before declaring another war. The declaration of war which may be avoided is the greatest of human crimes.

April 21, with a view of supplying Stoneman's cavalry, expected soon at Warrenton, a construction train was started to reopen the Orange & Alexandria road. Operators H. W. Cowan and J. H. Emerick accompanied it. It seems that while the great armies were contending for mastery at Chancellorsville, Stoneman, with the two divisions of Union cavalry, was operating on Lee's communications. By special request of Stoneman, operator J. L. Cherry was selected to accompany him. At three A. M. of May 2, Stoneman arrived in sight of Louisa Court House, Virginia, a station on the Chesapeake & Ohio Railroad.

Cherry hurried to the depot, hoping to find circuit from Richmond. The operator, Smith, had barely escaped on the last train south, taking his register and relay, but left his key, cut-out, and an immense lightning arrester. Cherry connected his pocket instrument and listened to Richmond despatches of no special importance for an hour, when his office was cut off by some other nearer Richmond. For a week the cavalry operated within the enemy's lines nearly to Richmond, but accomplished much less than was expected. Lee's telegraphs were cut in five places and four telegraph stations were captured.

APPENDIX.

CIPHER NUMBER NINE COMPLETE.

A. M. TIME

Ann 1.30, Agnes 2.30, Anna 3.30, Amelia 4.30, Alice 5.30, Betsy 6.30, Barney 7.30, Barbara 8.30, Cora 9.30, Clara 10.30, Catherine 11.30, Clotilda 1, Delia 2, Deborah 3, Dorothy 4, Emma 5, Eugenia 6, Emily 7, Elizabeth 8, Fanny 9, Florence 10, Frances 11, Gertrude 12.

P. M.

Harriet 1, Hannah 2, Helen 3, Henrietta 4, Imogen 5, Jennie 6, Julia 7. Katy 8, Lucy 9, Laura 10, Libby 11 Mary 12, Martha 1:30, Minnie 2:30, Nancy 3:30, Nelly 4:30, Rosalie 5:30, Rosetta 6:30, Rebecca 7:30, Reliance 8:30, Sarah 9:30, Susan 10:30, Topsy 11:30, Viola 12:30.

MESSAGE OR DIVISION OF THREE LINES—COMMENCEMENT WORDS:

Army, Anson, Action,	Five columns.	Astor, Advance, Artillery,	Six columns.	Anderson, Ambush, Agree,	Four columns.

Six Column Route: Up the fourth column, down the third, up the second, down the first, up the fifth, down the sixth.

Four Column Route: Down the first, down the fourth, down the second, up the third.

Five Column Route: Up the second, up the third, up the fourth, down the first, down the fifth.

MESSAGE OR DIVISION OF FOUR LINES—COMMENCEMENT WORDS:

Battle, Boston, Blair,	Six columns.	Banks, Board, Battery,	Four columns.	Brigade, Beverly, Bates,	Five columns.

Six Column Route: Up the fifth column, down the fourth, up the sixth, down the third, up the second, down the first.

Four Column Route: Up the second, down the first, up the third, down the fourth.

Five Column Route: Up the third, up the fifth, up the first, up the fourth, up the second.

MESSAGE OR DIVISION OF FIVE LINES—COMMENCEMENT WORDS:

Cairo, Curtin, Cavalry,	Four columns.	Congress, Colburn, Childs,	Five columns.	Calhoun, Church, Cobb,	Six columns.

Six Column Route: Up the sixth column, down the fifth, up the fourth, down the third, up the second, down the first.

Four Column Route: Down the fourth, down the second, down the first, down the third.

Five Column Route: Down the fifth, up the first, down the fourth, up the third, up the second.

MESSAGE OR DIVISION OF TEN LINES—COMMENCEMENT WORDS:

Driver, Dupont, Dunn,	Four columns.	Enemy, Enlist, Engage,	Six columns.	Forward, Foote, Forts,	Five columns.

Six Column Route: Down the third, up the fourth, down the second, up the fifth, down the first, up the sixth.

Four Column Route: Down the third, up the second, up the fourth, down the first.

Five Column Route: Up the third, down the second, down the fourth, up the first, down the fifth.

MESSAGE OR DIVISION OF SEVEN LINES—COMMENCEMENT WORDS:

Grayson, Giles, Grafton,	Six columns.	Guard, Henry, Harbor,	Five columns.	Kelly, Lucky, Mobile,	Four columns.

Six Column Route: Down the fourth, up the third, down the fifth, up the second, down the first, up the sixth.

Four Column Route: Down the second, up the first, down the third, up the fourth.

Five Column Route: Up the first, down the second, up the fifth, down the fourth, up the third.

MESSAGE OR DIVISION OF EIGHT LINES—COMMENCEMENT WORDS:

Morton, Memphis, Navy,	Six columns.	Potts, Porter, Perry,	Five columns.	Regular, Rosecrans, Run,	Four columns.

Six Column Route: Up the sixth, down the first, up the fifth, down the fourth, up the second, down the third.

Four Column Route: Up the fourth, down the second, up the first, down the third.

Five Column Route: Up the fourth, down the third, up the fifth, down the second, up the first.

MESSAGE OR DIVISION OF NINE LINES—COMMENCEMENT WORDS:

Skirmish, Sherman, Sumter,	Four columns.	Todd, Theater, Thomas,	Five columns.	Volunteers, Wise, War,	Six column.

Six Column Route: Up the third column, down the second, up the fourth, down the fifth, up the first, down the sixth.

Four Column Route: Up the fourth, up the second, up the third, up the first.

Five Column Route: Down the first, up the third, down the second, up the fifth, down the fourth.

MESSAGE OR DIVISION OF SIX LINES—COMMENCEMENT WORDS:

Yates, Lincoln, Chase,	Five columns.	Stanton, McClellan, McDowell,	Six columns.	Halleck, Buell, Sibley,	Seven columns.

Seven Column Route: Up the fourth column, down the third, up the fifth, down the second, up the first, down the sixth, up the seventh.

FIVE COLUMN ROUTE.

×	×			×
15	25	26	16	6
14	24	27	7	5
13	23	8	17	4
12	9	28	18	3
10	22	29	19	2
11	21	30	20	1
×		×	×	

Six Column Route is shown on page 51.

ARBITRARIES.

Adam.	President of U. S.	Asia.
Abel.	Secretary of State.	Austria.
Aaron.	Secretary of War.	Arabia.
Amos.	Secretary of Treasury.	Africa.
Anthon.	Secretary of Navy.	America.
Acton.	Secretary of Interior.	Alba.
Abner.	Postmaster General.	Alpha.
Alden.	Attorney General.	Andover.
Alvord.	Adjutant General.	Antwerp.
Abbot.	Quartermaster General.	Aragon.

Adrian.	John G. Nicolay.	Alloy.
Apollo.	Fred. W. Seward.	Altar.
Alps.	Peter H. Watson.	Amber.
Andes.	John G. Tucker.	Anchor.
Arctic.	C. O. Wolcott.	Angel.
Appian.	George Harrington.	Animal.
Atlas.	G. V. Fox.	Annal.
Alamo.	J. Dahlgren.	Armada.
Akron.	H. A. Wise.	Anvil.
Adair.	E. D. Townsend.	Apple.

MAJOR GENERALS.

Archery.	Winfield Scott.	Ark.
Asp.	Geo. B. McClellan.	Axis.
Alkali.	John C. Fremont.	Attica.
Applause.	H. W. Hallock.	Abortion.
Adorn.	John A. Dix.	Agate.
Alias.	N. P. Banks.	Amen.
Abbey.	B. F. Butler.	Audit.
Babel.	John E. Wool.	Baden.
Baltic.	David Hunter.	Berlin.
Bremen.	Irvin McDowell.	Brussels.
Bangor.	U. S. Grant.	Bengal.
Bagdad.	D. C. Buell.	Bethel.
Bedford.	John Pope.	Biscay.
Bergen.	O. M. Mitchell.	Bombay.
Botany.	Samuel R. Curtiss.	Bourbon.
Belgium.	Franz Sigel.	Bermuda.
Berkshire.	E. V. Sumner.	Belgrade.
Bologna.	S. P. Heintzelman.	Bolivia.
Bruno.	Fitz John Porter.	Brutus.
Byron.	Wm. B. Franklin.	Bunyan.
Burton.	A. E. Burnside.	Buxton.
Barnard.	E. D. Keyes.	Balfour.
Beach.	Lewis Wallace.	Burton.
Bender.	Jno. A. McClernand.	Belcher.
Benjamin.	W. S. Rosecrans.	Bennet.
Borgia.	Joseph Hooker.	Berry.

NAVAL AND OTHER OFFICERS.

Bethune.	Faragut.	Blanchard.
Bigelow.	Goldsborough.	Bolton.
Bonner.	Wilkes.	Bishop.
Baboon.	Foote.	Badger.
Banjo.	Dupont.	Barber.
Bard.	Rowan.	Baron.
Ballad.	Porter.	Balmoral.
Banditti.	Davis.	Baptism.
Bible.	Rogers.	Basement.
Bassoon.	Schofield.	Beadle.
Beacon.	Hurlbut.	Bear.
Beauty.	Jno. J. Parke.	Beaver.
Bigamy.	Herron.	Bigot.
Bladder.	Blunt.	Bleaching.
Black.	Sherman.	Blubber.
Bogus.	Washburn.	Booby.
Brandy.	McPherson.	Bravo.
Bridle.	Ellett.	Brimstone.
Brocade.	Prentiss.	Bromley.
Budget.	McArthur.	Buffet.
Burglar.	Oglesby.	Buggy.
Bargain.	Lauman.	Basket.
Barth.	Kimball.	Behead.
Bellows.	C. A. Dana.	Belly.
Berth.	Roanoke.	Biped.
Blossom.	Monitor.	Bracket.

STATES.

Camden.	Me.	Cadmus.
Clarence.	N. H.	Claudius.
Coburg.	Vt.	Cognac.
Columbia.	Mass.	California.
Chester.	Ct.	Carroll.
Clifton.	R. I.	Carthage.
Cuba.	N. Y.	Champlain
Cheshire.	Pa.	Clyde.
China.	Del.	Catawba.
Camargo.	Md.	Census.
Century.	Va.	Cedar.
Castor.	O.	Cologne.
Carbon.	Mich.	Carpet.
Cancer.	Ind.	Camel.
Canary.	Ill.	Camphor.
Calendar	Wis.	Cabbage.
Charity.	Ia.	Cherry.
Chicken.	Minn.	Children.
Chorus.	Mo.	Clam.
Climax.	Ky.	Cider.
Churn.	Tenn.	Chapel.
College.	Ks.	Color.
Comet.	Cal.	Cupid.
Costume.	Ore.	Comb.
Corunna.	N. J.	Cherub.
Falcon.	Ga.	Finland.
Flora.	Ala.	Fortune.
Farmer.	La.	Famish.

GOVERNORS.

David.	I. Washburn, Me.	Daniel.
Denmark.	U. S. Berry, N. H.	Danube.
Darby.	Jno. A. Andrew, Mass.	Dalton.
Dresden.	Wm. A. Buckingham, Ct.	Dryden.
Dolphin.	Wm. Sprague, R. I.	Dragon.
Damon.	Fred. Holbrook, Vt.	Dublin.
Durham.	E. D. Morgan, N. Y.	Diana.
Dawn.	Chas. S. Olden, N. J.	Devon.
Domain.	A. G. Curtin, Pa.	Dropsy.
Damask.	Wm. R. Barton, Del.	Dimple.
Dagger.	A. W. Bradford, Md.	Darling.
Dauphin.	F. H. Pierpont, Va.	Dentist.
Dirgie.	David Todd, O.	Discount.
Dismal.	Austin Blair, Mich.	Divine.
Docket.	O. P. Morton, Ind.	Dodge.
Drill.	Richard Yates, Ill.	Drum.
Duke.	Edward Solomon, Wis.	Duchess.
Dungeon.	Sam'l J. Kirkwood, Ia.	Dumps.
Europe.	Alexander Ramsay, Minn.	Empire.
Egypt.	H. R. Gamble, Mo.	Emblem.
Eagle.	B. Magoffin, Ky.	Essex.
Eddy.	Andy Johnson, Tenn.	Emmet.

RIVERS.

France.	Arkansas.	Frog.	Golden.	Shenandoah.	Goose.
Feather.	Big Sandy.	Filter.	Gondola.	Savannah.	Granby.
Flanders.	Cumberland.	Flannel.	Grammar.	St. Mary's.	Gregory.
Flint.	Chowan.	Florida.	Godwin.	Tennessee.	Gliddon.
Fool.	Cape Fear.	Fox.	Griffin.	Tar.	Gifford.
Fork.	Chickahominy.	Fraction.	Guns.	Trent.	Girls.
Gideon.	Edisto.	Gabriel.	Grapes.	Tombigbee.	Growl.
Gotham.	Elizabeth.	Galena.	Grub.	White River.	Grunt.
Galway.	Kanawha.	Garden.	Hagar.	York.	Homer.
Gallon.	Mississippi.	Gourd.	Horace.	Yazoo.	Harvey.
Garter.	Neuse.	Germany.	Hamlet.	James River.	Hannibal.
Georgia.	Ohio.	Genoa.	Hebrew.	Pamunkey.	Hindoo.
Geneva.	Ogechee.	Gaul.	Harvard.	Big Black.	Humboldt.
Gem.	Potomac.	Ginseng.	Hastings.	Acquia Creek.	Haven.
Ginger.	Rappahannock.	Gland.	Harlem.	Pearl.	Hampden.
Girdle.	Rapidan.	Granada.	Holland.	Tallahatchie.	Honduras.
Glasgow.	Roanoke.	Gilead.	Hungary.	Chickasaw Bayou.	Hunger.
Globe.	Red River.	Glover.			

Forts.

Hemlock.	Delaware.	Hemp.	Huron.	Pulaski.	Hang.
Hymen.	Hatteras.	Hair.	Hunter.	Pickens.	Happy.
Herald.	Jackson.	Harp.	Harlot.	Randolph.	Hatchet.
Highness.	Key West.	History.	Hoax.	Sumter.	Hotel.
Hosanna.	Lafayette.	Husband.	Humbug.	Wool.	Huckster.
Hammock.	Monroe.	Hammer.	Haddock.	Warren.	Humphrey.
Holly.	Macon.	Hero.	Harmony.	Cedar Keys.	Hawley.

Places.

Ida.	Abingdon.	Ink.	Mastiff.	Memphis.	Melon.
Irving.	Augusta.	Ingress.	Mentor.	Murfreesboro.	Meridian.
Ingrate.	Atlanta.	Ingot.	Merlin.	New York.	Midas.
	Albany.	Indus.	Milan.	Norfolk.	Milk.
Indigo.	Boston.	Infant.	Mint.	New Orleans.	
Image.	Baltimore.	Insanity.	Mohawk.	Newburn.	Monarch.
Ireland.	Beaufort.	Italy.	Monster.	Natchez.	Montrose.
	Baton Rouge.	Ivory.	Moon.	Nashville.	Moscow.
Jacob.	Culpeper.		Myrtle.	Portland.	Mystic.
Jonah.	Charleston.	Jordan.	Maroon.	Philadelphia.	Mellow.
Judah.	Charlottesville.	John.	Music.	Port Royal.	Maxim.
Juno.	Charlotte.	Jupiter.	Mud.	Pensacola.	Muss.
Japan.	City Point.	Jersey.	Nabob.	Petersburg.	Nankin.
Jasmine.	Chattanooga.		Nestor.	Raleigh.	Nettle.
Java.	Corinth.	Jamaica.	Neptune.	Richmond.	Negus.
Jargon.	Cumberland Gap.	Jaundice.	Niagara.	Savannah.	Nile.
Jaunt.	Port Hudson.	Javelin.	Nose.	Suffolk.	Nasty.
Jolly.	Little Rock.	Journal.	Nutmeg.	Staunton.	Nugget.
Keate.	Danville.	Kindle.	Nuptial.	Salisbury.	Negro.
King.	Decatur.	Kingdom.	Niggard.	Stevenson.	Nuisance.
Knell.	Elizabeth City.	Knight.	Nurse.	Sperryville.	Nymph.
Kennebec.	Farmington.	Kidnap.	Opal.	Tuscumbia.	Oyster.
Knapsack.	Fredericksburg.	Kitchen.	Offal.	Urbana.	Olive.
Kasson.	Florence.	Kunkle.	Oakum.	Vicksburg.	Odor.
Lady.	Galveston.	Lamb.	Oats.	Williamsburg.	Oil.
Lantern.	Gordonsville.	Lafitte.	Optic.	Winchester.	Orbit.
Lapland.	Goldsboro.	Language.	Orchard.	Witherville.	Owl.
Lark.	Grenada.	Lawn.	Oxide.	Weldon.	Ordnance.
Leghorn.	Helena.	Legend.	Peru.	Wilmington.	Persia.
Lehigh.	Holly Springs.	Leopard.	Pagan.	Washington.	Pagoda.
Liberia.	Humboldt.	Lobster.	Palate.	Yorktown.	Palsy.
Lock.	Jackson.	Locust.	Panther.	Yazoo City.	Pelican.
Logan.	Kingsville.	Luther.	Pardon.	Haine's Bluff.	Parson.
Luna.	Lynchburg.	Limpid.	Patent.	Milliken's Bend.	Patron.
Lonesome.	Mobile.	Lester.	Peasant.	Napoleon, Ark.	Perfume.
Magnet.	Manassas.	Madder.	Pewter.	Port Gibson.	Pilot.
Madrid.	Montgomery.	Magic.	Princess.	Grand Gulf.	Pilgrim.
Magnolia.	Meridian.	Malta.			

CONFEDERATE GENERALS.

Plato.	Morgan.	Plainfield.	Quincy.	Wheeler.	Quitman.
Plum.	Chalmers.	Pocket.	Quiver.	Breckenridge.	Quack.
Polk.	Buckner.	Pontiac.	Quadrant.	Bragg.	Quadroon.
Poplar.	W. H. T. Walker.	Portage.	Queenly.	Johnston.	Quotient.
Prescott.	Lee.	Preston.	Quince.	Marmaduke.	Question.
Princeton.	Beauregard.	Prospect.	Query.	Price.	Quick.
Putnam.	Loring.	Pickets.	Quorum.	Pemberton.	Quarrel.
Quaker.	Forrest.	Queen.			

MISCELLANEOUS.

Randolph.	Arms.	Raymond.	Shylock.	Regiments.	Stanhope.
Richard.	Artillery.	Rodney.	Spur.	Right Flank.	Spruce.
Ramsay.	Ammunition.	Ransom.	Star.	Siege Guns.	Sugar.
Robin.	Batteries.	Raven.	Sulphur.	Smooth Bore.	Squash.
Rabbit.	Bridge.	Racine.	Sweden.	Scouts.	Sutton.
Raleigh.	Brigade.	Reading.	Smyrna.	Scouting.	Sidney.
Relay.	Cavalry.	Roanoke.	Sligo.	Scouting Party.	Stephen.
Ripley.	Cannon.	Richland.	Stanley.	Sailing Vessels.	Swallow.
Ridge.	Convoys.	Rome.	Summer.	Skirmishers.	Summit.
Rose.	Coast.	Rockland.	Sylvan.	Stragglers.	Steuben.
Roland.	Carbines.	Rubens.	Swindle.	Steamboats.	Surgery.
Ramble.	Deserters.	Rampant.	Supper.	Telegraphs.	Superb.
Rapture.	Engineers.	Ravish.	Stomach.	Transportation.	Stagger.
Reptile.	Entrenchment.	Ragged.	Spunky.	Volunteers.	Squadron.
Retrench.	Earthworks.	Review.	Spoon.	Transports.	Spit.
Reward.	Forts.	Romance.	Valley.	Brigadier Gen'l.	Vermont.
Rusty.	Fleet.	Ruffle.	Vernon.	Major General.	Vermin.
Saco.	Flotilla.	Salem.	Venus.	Colonel.	Vesper.
Saginaw.	Fortifications.	Scotland.	Vienna.	Major.	Village.
Sandy.	Forage.	Saint.	Virtue.	Captain.	Vulcan.
Saxon.	Guns.	Savory.	Vulture.	Lieutenant.	Vomit.
Sampson.	Gunboats.	Salmon.	Vincent.	Quartermaster.	Vinton.
Seneca.	Guards.	Sexton.	Violet.	Paymaster.	Virgin.
Saffron.	Harbor.	Sable.	Vista.	Surgeon.	Volcano.
Segment.	Infantry.	Seymour.	Walden.	Attack.	Wales.
Shandy.	Island.	Shaker.	Wafer.	Advance.	Wallace.
Saddle.	Mortar Boats.	Shallow.	Walpole.	Army.	Walnut.
Shannon.	Marines.	Sharon.	Warner.	Battle.	Warsaw.
Shark.	Mortars.	Spark.	Warwick.	Cutoff.	Wampum.
Sharper.	Pickets.	Sheffield.	Watkins.	Casualties.	Watson.
Shelby.	Projectiles.	Shelter.	Wayland.	Capture.	Wayne.
Shoal.	Point.	Smoky.	Weakness.	Defensive.	Webb.
Silver.	Regulars.	Snake.	Welch.	Defend.	Weldon.
Simms.	Rebels.	Snow.	Wells.	Diversion.	Wesley.
Soap.	Railroad.	Somers.	Wharton.	Division.	Whip.
Spafford.	River.	Spartan.	White.	Equipage.	Wick.
Spencer.	Rifled Guns.	Spring.	Wiley.	Enemy.	Windham.

Windpipe.	Flank.	Windsor.	Whist.	Wounded.	Whistle.
Winthrop.	Fall back.	Woodbine.	Wrangle.	Intercept.	Wreath.
Woodford.	Feint.	Woodland.	Wriggle.	Cipher.	Wrinkle.
Woolwich.	Fight.	Wyoming.	Wadding.	Arrest.	Waggish.
Walrus.	Killed.	Webster.	Weston.	Spy.	Wisdom.
Wag.	Left Wing.	Waltz.	Washington.	Traitor.	Wilcox.
Warden.	Missing.	Warp.	Wooster.	Treasonable.	Worcester.
Waspish.	Outflank.	Watchman	World.	Rear.	Walker.
Waxend.	Offensive.	Waxy.	Winston.	Front.	Wilkes.
Wayworn.	Reconnoissance.	Weasel.	Wicoff.	Invested.	Wilson.
Wean.	Retreat.	Weird.	Wabash.	Intercept.	Winona.
Web.	Resist.	Weld.	Winchester.	Embarking.	Williams-port.
Widow.	Right Wing.	Wedding.			
Wedlock.	Rifle Pits.	Whack.	Woodbury.	Assault.	Waldo.
Wedge.	Subsistence.	Wharf.	Young.	Camp.	Yarmouth.
Weigh.	Surprised.	Wheedle.	Yancey.	Head-quarters.	Yacht.
Whelp.	Surrounded.	Wheaten.	Yankee.	Reinforcements.	Yardstick.
Wherry.	Skirmish.	Whig.	Yellow.	Recruits.	Yawl.
Whiff	Threaten.	Whimper.	Youth.	Troops.	Yoke.
Whinney.	Union.	Whiskey.	Zodiac.	Movements.	Zebra.

LIBRARY OF THE UNIVERSITY OF CALIFORNIA.

THIS BOOK IS DUE ON THE LAST DATE STAMPED BELOW

RETURN TO ⟶ **CIRCULATION DEPARTMENT**
202 Main Library

LOAN PERIOD 1 **HOME USE**	2	3
4	5	6

ALL BOOKS MAY BE RECALLED AFTER 7 DAYS
1-month loans may be renewed by calling 642-3405
6-month loans may be recharged by bringing books to Circulation Desk
Renewals and recharges may be made 4 days prior to due date

DUE AS STAMPED BELOW

SEP 10 1978
REC. CIR. MAY 29 '84
REC. CIR. AUG 10 '78
MAY 10 1989
APR 1 1980
REC. CIR. MAR 31 1980
MAR 12 1982
MAR 8 1989
MAY 28 1984
JUL 27 1988
~~AUG 29 88~~
~~OCT 1 88~~
OCT 30 88

UNIVERSITY OF CALIFORNIA, BERKELEY
FORM NO. DD6, 40m, 3/78 BERKELEY, CA 94720

YC 63736

U.C. BERKELEY LIBRARIES
C005395260